



# Pat Martino

*LINEAR EXPRESSIONS*

## CONTENTS

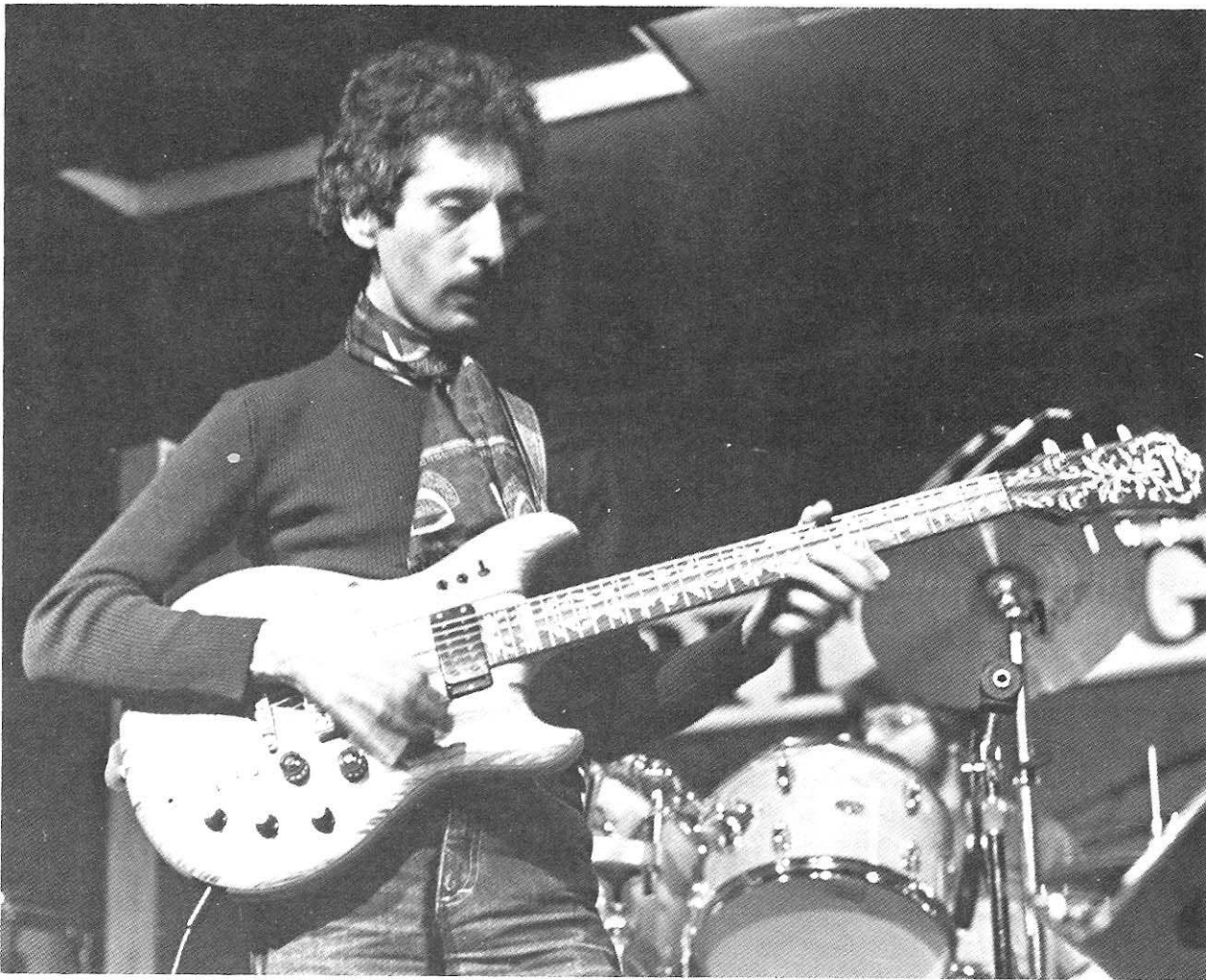
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Foreword . . . . .	4
Introduction . . . . .	5
Course Description . . . . .	6
Phase I . . . . .	7
Phase II . . . . .	17
Phase III . . . . .	29
Phase IV . . . . .	51
In Closing . . . . .	64

## FOREWORD

The following linear expressions are a form of art. In Webster's dictionary the definition of the word 'art' is stated that "art implies a personal unanalyzable creative power", whereas the word 'skill' stresses technical knowledge and proficiency, and in both cases the word 'arduous' is stated as "that which is hard to accomplish or achieve with difficulty, marked by a great labor or effort".

Art has many social problems. One of the greatest is that all successful artists have become successful through being publicly confined to the fields in which they are most marketable. Therefore most of their music is heard on a media oriented basis. With regard to the artists' private expressions it's extremely possible that what truly moves that artists will also move the public. But unfortunately, the industry of recorded music in most cases keeps that artist and the public in rigid tow. It's through this that success has nothing to do with expression unless of course, we as artists no longer seek that success from the industry itself but gain it through privately sharing with the public itself, because if the true artist chooses to do this rather than the other, in many cases the industry itself shall now come to seek the artist because through sharing with all, that artist shall now care less about seeking the industry and will no longer have to wait his or her life trying to reach or retain success. It's now the true art that shall emerge for both the public and industry.





## INTRODUCTION

From the time the aspiring guitar player is first introduced to the instrument, he (or she) is exposed and subjected to many trials and tribulations. One must experience the frustration and despair which, unfortunately, are an essential part of a musician's life from infancy on up through adulthood. It is from this that one acquires an insatiable lust for knowledge; the knowledge that is imperative to growth as a guitar player, musician and above all else, an artist.

One of the difficulties that a student of the guitar encounters very early in their growth is the lack of technique and physical dexterity needed to play the instrument effectively. The guitar, after all, is a very physical instrument and demands both coordination and agility from both hands.

After years of practice, the young guitar player will eventually overcome kinetic disabilities and begin to focus more and more upon what is being played as opposed to how it is played. In other words, the quality of the music is now the primary concern. With this in mind, the maturing guitarist will temporarily sedate his on-going urge to play lightening fast guitar licks and flashy feats of fingerboard gymnastics. Finally, the guitarist comes face to face with the nemesis of every budding musical artist, namely, improvising over chord changes.

Ever since the sounds of Charlie Parker's alto sax were first heard resonating the sidewalks and streets of Harlem and filling the air with a tempestuous roar of the then new sound called "Be-Bop", the art of improvisation has become one of the most explored areas in music. Much of the theory and concepts in use today incorporate and advocate the use and memorization of many different types of scales, arpeggios, etc. Ideally one should try to treat every chord change of the progression with the proper device.

The following is a II V I progression which shows some of the possible single note devices which can be played over each of the chords.

### EXAMPLE:

<b>Dm7</b>	<b>G7</b>	<b>Cmaj7</b>
D Dorian	G Mixolydian	C Ionian
Dm7 Arpeggio	Fmaj7 Arpeggio	Cmaj7 Arpeggio
Dm Scale	Ab Diminished Scale	Cmaj7 Scale

Although the aforementioned method is correct and true, you can clearly see that it can and often does become cumbersome and arduous, to say the least. To fully master and obtain fluency in this style takes many years of study as well as ardent determination.

There are, however, two sides to every coin. If we were to call the now accepted methods of study complexity, then conversely, the other side of the coin must be simplicity. It is, however, to be understood that although the method outlined in this work is a more simple approach to linear improvisation, all avenues of study, whether they be simple or complex, must be explored. For the art of improvisation is by no means to be considered simple or easy and should not be taken lightly.

On the following pages, you will be introduced to a somewhat different approach to improvising over chord changes. What makes this approach different from other methods presently in use today is that this system utilizes the **minor chord** and **minor line** form only. To further explain, all chords whether they be of major, minor, dominant, augmented, diminished, or half diminished quality, can either directly or indirectly be reduced to or substituted by a minor chord form.

### EXAMPLE:

Cmaj7	.....	Am7
G7	.....	Dm7
Em7b5	.....	Gm6

Once this is achieved, the player need only to play minor type melodic ideas over the minor reductions and substitutions. In other words, **convert to minor**.

The preceding is a brief, approximate explanation of the work herein. The subject will obviously be dealt with in more detail throughout the course of the book. Read on!



## COURSE DESCRIPTION

The course of study presented in this book will be divided into four phases. The phases are as follows:

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### **PHASE I: Horizontal Movement:** Inversions and Activities In One Key

- A. Introduction to a Gm7 chord form which will invert itself systematically three times up the guitar neck, yielding four individual chord inversions.
- B. Introduction to the five basic activities (line forms) and their relationship to their four respective chord inversions.
- C. The coverage of one key (G minor) over a span of twelve frets (one octave) horizontally up the fingerboard.

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### **PHASE II: Vertical Movement:** Inversions and Activities In All 12 Keys

Transposing the five basic activities (line forms) and four chord inversions and locate all 12 keys in one sector of the guitar neck.

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### **PHASE III: Horizontal and Vertical Movement:** Line Studies

The transposition and connection of the five basic activities (line forms) to formulate a continuous line passing through all 12 keys. Each of the five basic activities is the basis of two separate line studies. Each set of line studies will move vertically and horizontally up the neck with its respective starting line form, facilitating total command and access to any key, anywhere on the fingerboard.

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### **PHASE IV: Application Through Substitution and Reduction**

With the aid of an original song titled "Nadine," all of the principles discussed in this book will be practically applied.

- A. Through analysis, the complex chord changes of the tune will be reduced to simple minor chord forms.
- B. A sample study, constructed of the basic activities, is provided at the end of this section.

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It is important to ask that you do not proceed to Phase II until Phase I is fully understood. The same holds true throughout the course of the book.

# PHASE I: Horizontal Movement

## Inversions and Activities In One Key

Since the subject discussed in this work is that of the minor chord and minor line form and how they are used as a basis for linear improvisation, we will start with a basic form of a Gm7 chord and demonstrate its systematic inversion horizontally up the guitar neck. The result will be four different forms of a Gm7 chord.

### INVERSIONS

To systematically invert any chord we must first select a set of strings on which the starting chord will be built. (Hereafter to be referred to as string sets.) The string set selected is 6 4 3 2 (the sixth, fourth, third, and second strings).

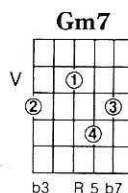
The next step is to choose a chord voicing of Gm7 that lies on this string set. The voicing we will use is a 1 b7 b3 5 inversion of a Gm7 chord. To further explain, the root (1) of the chord will fall on the sixth string, the b7 degree of the chord will fall on the fourth string etc.

FORM 1: Gm7      string set: 6 4 3 2  
                     voicing: 1 b7 b3 5



To find the next inverted form of this chord, raise each voice in the first form by one degree.

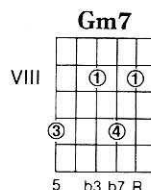
FORM 2: Gm7      string set: 6 4 3 2  
                     voicing: b3 1 5 b7



The 1 b7 b3 5 voicing becomes a b3 1 5 b7 voicing.

We now repeat the procedure to produce the third form of Gm7.

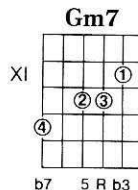
FORM 3: Gm7      string set: 6 4 3 2  
                     voicing: 5 b3 b7 1



The b3 1 5 b7 voicing becomes a 5 b3 b7 1 voicing.

We repeat the procedure once more to arrive at the fourth and final form.

FORM 4: Gm7      string set: 6 4 3 2  
                     voicing: b7 5 1 b3



The 5 b3 b7 1 voicing becomes a b7 5 1 b3 voicing.

You should now familiarize yourself with these four chord inversions as they will be used throughout Phases I & II, and are a partial basis of the activities to follow.

## ACTIVITIES

The next area of study to be discussed is of a melodic nature. As the term "linear improvisation" suggests, melodic line forms must be improvised over various harmonic structures, creating a solo. These line forms (hereafter to be referred to as **activities**) can be related to both a chord and scale form.

The key we will be dealing with at the present time is G minor. Since G minor is derived from a Bb major scale (Gm being the relative minor of Bb major), it is important to know where on the guitar neck the Bb major (Gm) scales are located. For it is from these scales, along with the previously mentioned chord forms, that five forms of activities can be realized.

The following diagrams illustrate five forms of a Bb major (Gm) scale. Inclusive in the diagrams are the four G minor chord inversions and how they relate to their respective scale patterns. Notice that like the four chord inversions, the five scale patterns move horizontally up the fingerboard, until all twelve frets (one octave) are covered.

NOTE: The scale forms illustrated herein do not necessarily start and end on the root of the scale. They instead display every accessible scale tone in position.

### KEY

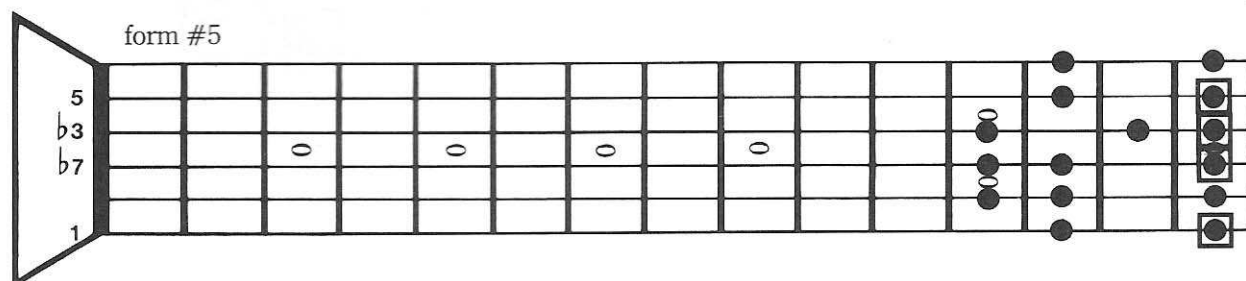
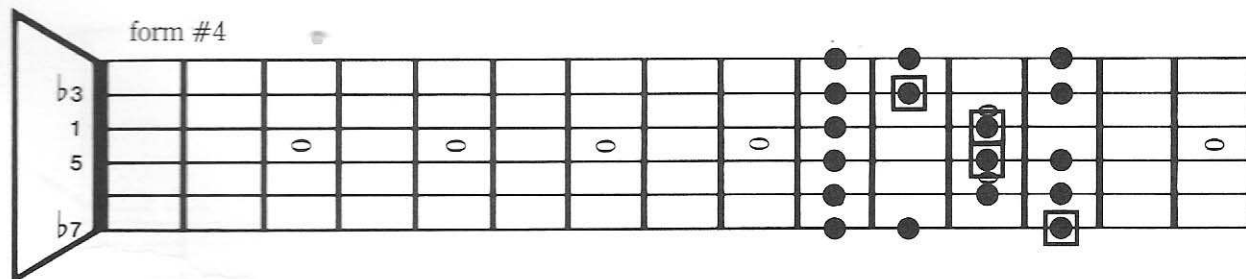
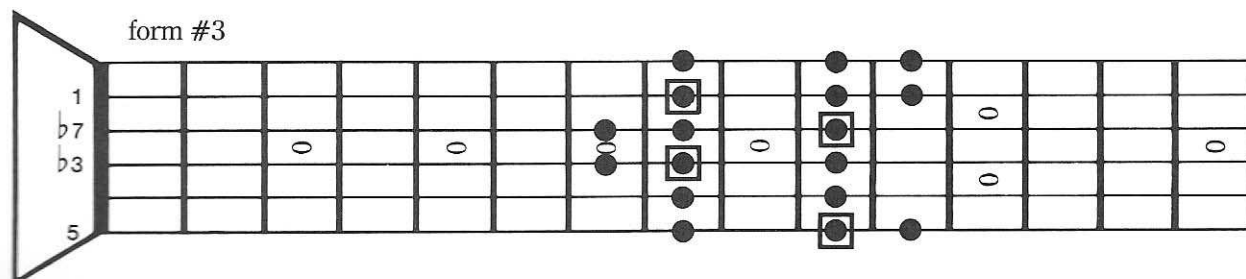
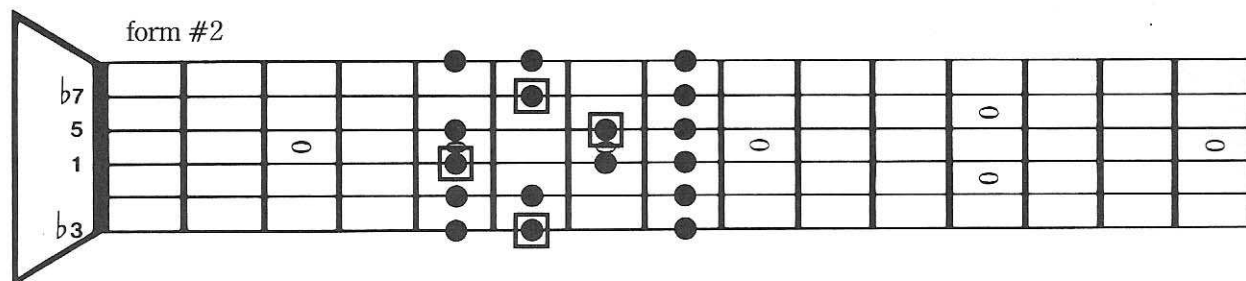
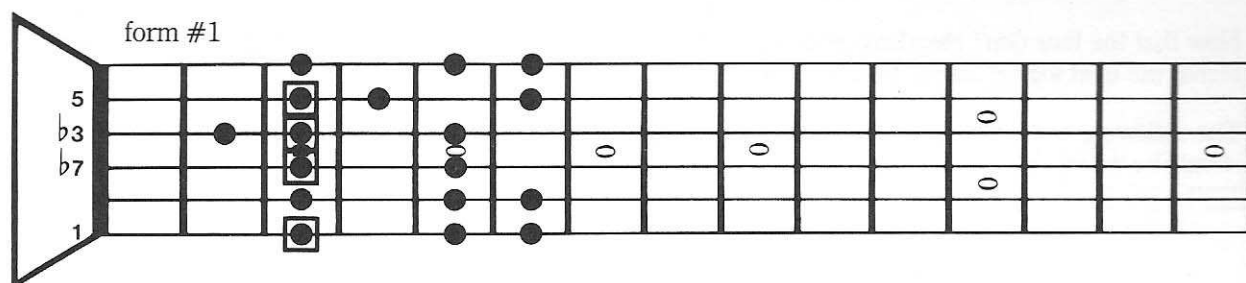
● = Scale Tone

◼ = Chord Tone within scale pattern

1 b3 5 b7 = Chord Tone Degrees as indicated at left of fingerboard diagrams.



Forms 1-5 illustrate the four Gm7 chord inversions and their relationship to their five parent scales (Bb major-Gm).



Notice that form V uses the identical Gm7 chord inversion as form I, one octave up. This will hold true throughout the study.

Now that the four Gm7 chord inversions have been associated with the five G minor (Bb major) scale patterns, the next logical step is to relate five basic forms of activity to them.

The following activities (line forms) should be associated with their respective chord inversions. They should be thoroughly understood and memorized before moving on.

### THE FIVE BASIC FORMS OF ACTIVITIES

Each of the following forms of activities (line forms) is depicted with its respective chord inversion. Each activity is notated both musically as well as graphically. The graphic diagrams will aid you not only in fingerings, but also act as a visual guide in relating the five activities to their Gm chord and scale forms.

When learning these activities it's a good idea to play their respective chord forms immediately before playing each activity. Each chord form will dictate the activity to be played (except in the case of the first chord form which names both the first and fifth activities).

For: **CHORD FORM**

Form 1
Form 2
Form 3
Form 4

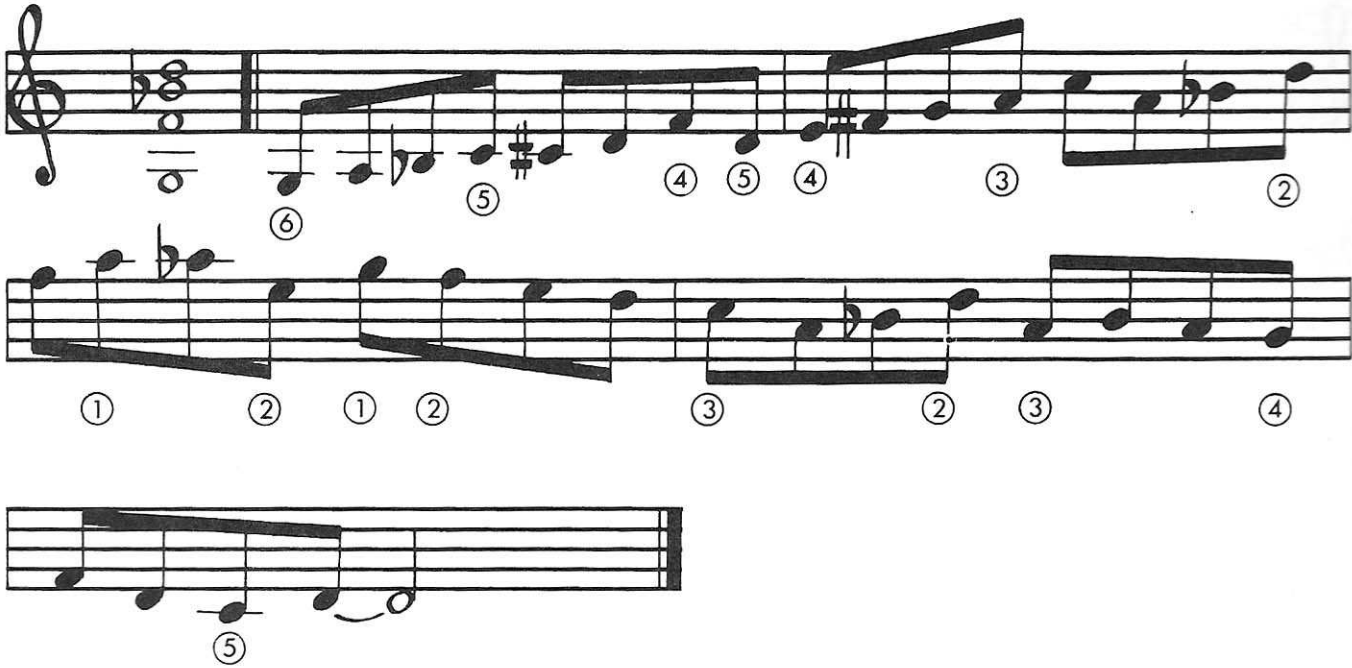
Use: **ACTIVITY**

Forms 1 & 5
Form 2
Form 3
Form 4

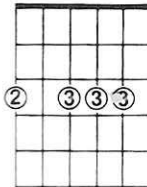
## ACTIVITY #1

The first activity (in the key of G minor) starts in the third position, and spans from the second to sixth fret on the fingerboard. It clearly outlines a G minor scale which should make it relatively easy to memorize and associate with its naming key. At this time it should be made clear that the form of activity does not make reference to the key it is in, Bb.

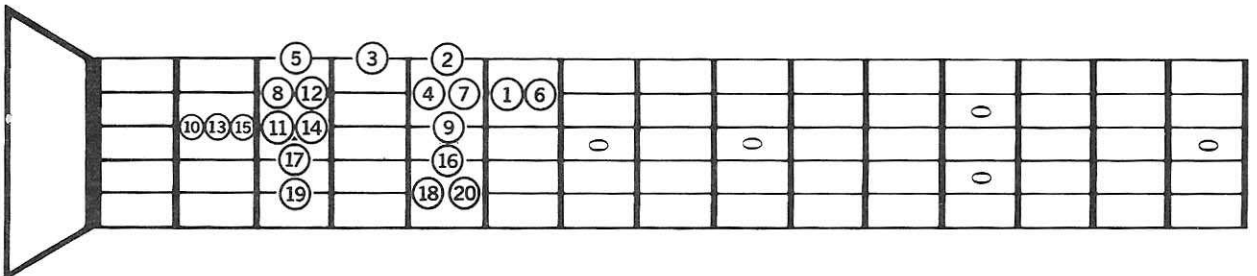
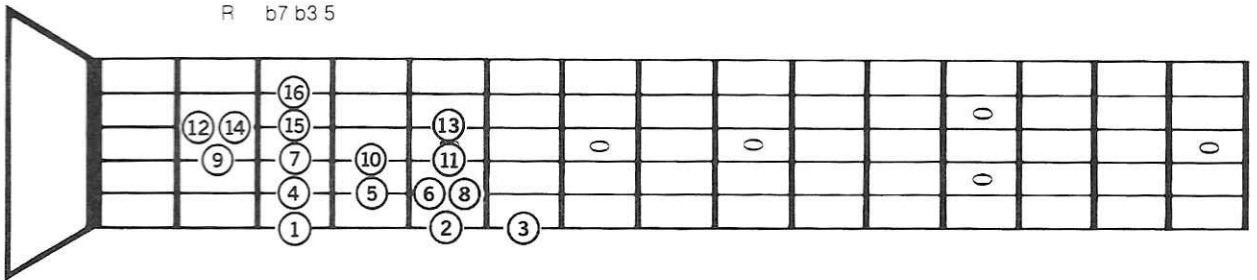
EXAMPLE: The first activity, starting in the third position is the key of G minor.  
The first activity starting in the fifth position is the key of A minor, etc.



### Gm7



R b7 b3 5





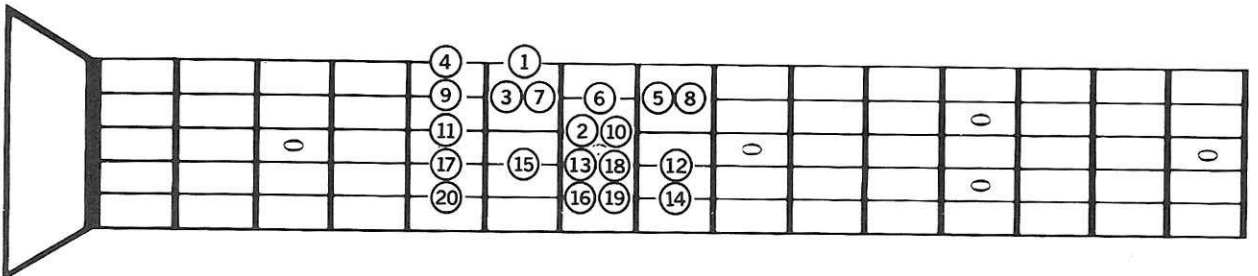
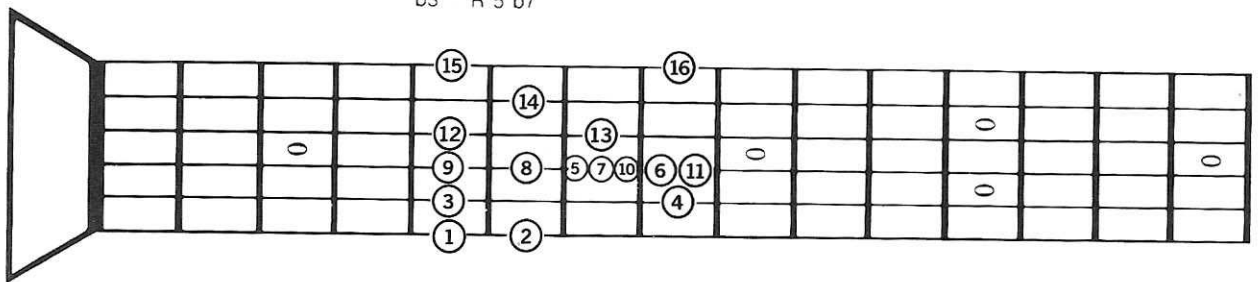
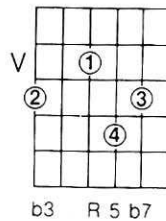
## ACTIVITY #2

The second activity in the key of G minor, lies totally in the fifth position, spanning the fifth to eighth fret. It outlines a Bbmaj7 arpeggio, starting from the maj7 degree of the Bbmaj7 (an "A" note).

Again it must be understood that the form of activity does not name the key you are in. The key is determined by where the form of activity is being played.



### Gm7



### ACTIVITY #3

The third activity, with the exception of the Bb note on the second string, lies in the seventh position. The G minor scale and arpeggio are visible throughout this activity.

Three staves of musical notation for Activity #3. The first staff shows a sequence of notes with fingerings 6, 5, 4, 5, 4, 3, 2. The second staff shows a sequence of notes with fingerings 3, 2, 1, 2, 3, 4, 3, 4, 5. The third staff shows a sequence of notes with fingerings 4, 5, 6, and a final note with a slur.

**Gm7**

VIII

	①	①
③		④

5 b3 b7 R

A guitar fretboard diagram showing fingerings for the Gm7 chord. The diagram is a 6x12 grid. Fingerings are indicated by circled numbers: 11, 10, 16, 13, 15, 14, 12, 8, 6, 1, 3, 5, 4, 7, 9, 2.

A guitar fretboard diagram showing fingerings for the Gm7 chord. The diagram is a 6x12 grid. Fingerings are indicated by circled numbers: 9, 8, 10, 7, 6, 5, 11, 12, 17, 20, 16, 22, 24, 15, 18, 21, 14, 19, 23, 3, 13, 4, 1.

# ACTIVITY #4

The fourth activity in the key of G minor, lies in the ninth and tenth positions and spans the ninth to eleventh frets. The minor shapes are still evident.

Three staves of musical notation for Activity #4 in G minor. The first staff shows a melodic line with fret numbers 6, 5, 4, 3, 4, 3, 2. The second staff shows a descending melodic line with fret numbers 1, 2, 3, 4, 5. The third staff shows a descending melodic line with fret numbers 5, 6, 5, 6, 5, 6, followed by a whole note chord.

**Gm7**

XI

b7 5 R b3

Two fretboard diagrams showing the fretboard from the 11th fret to the 24th fret. The top diagram shows the fretboard with the 11th fret highlighted. The bottom diagram shows the fretboard with the 11th fret highlighted. The fretboard is divided into sections by fret numbers 11, 12, 13, 14, 15, 16, 17, 18, 19, 20, 21, 22, 23, 24.

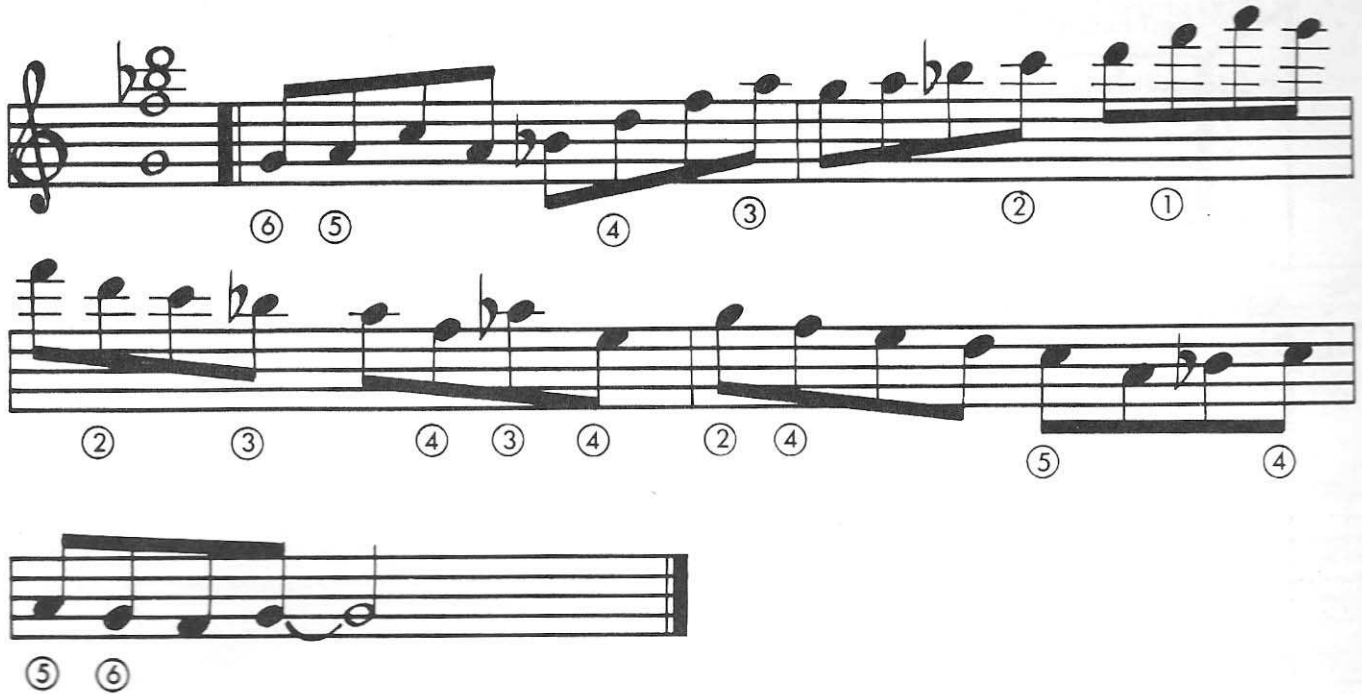


## ACTIVITY #5

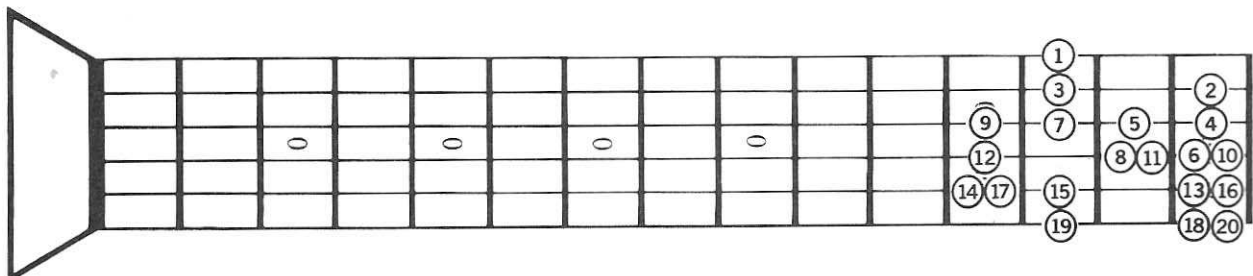
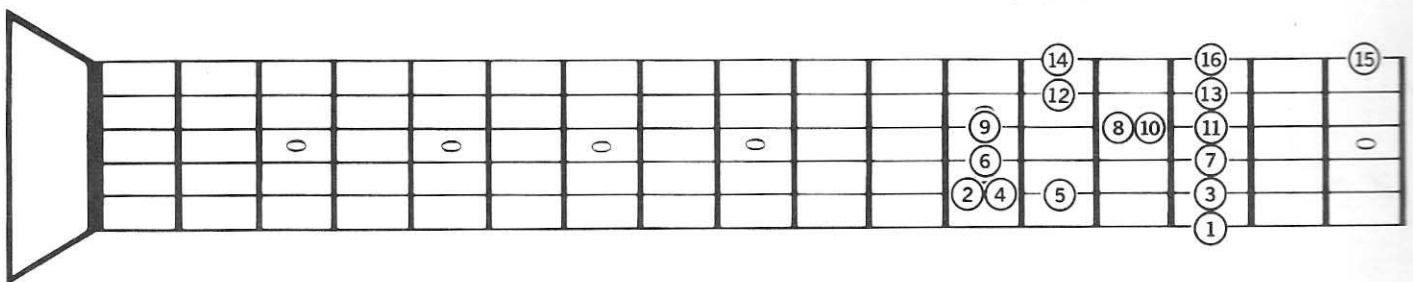
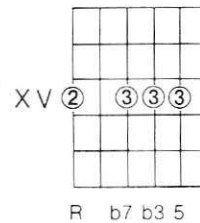
The fifth and final form of activity in the key of G minor completes the total coverage of the fingerboard in one key (G minor), over a distance of twelve frets (one octave). Notice that both the fifth and first activities start with the same note on the sixth string (a "G" note).

ERGO: The next logical form to follow, would be the first form of activity one octave higher.

Remember: The first and fifth activities share the same chord inversion.



### Gm7

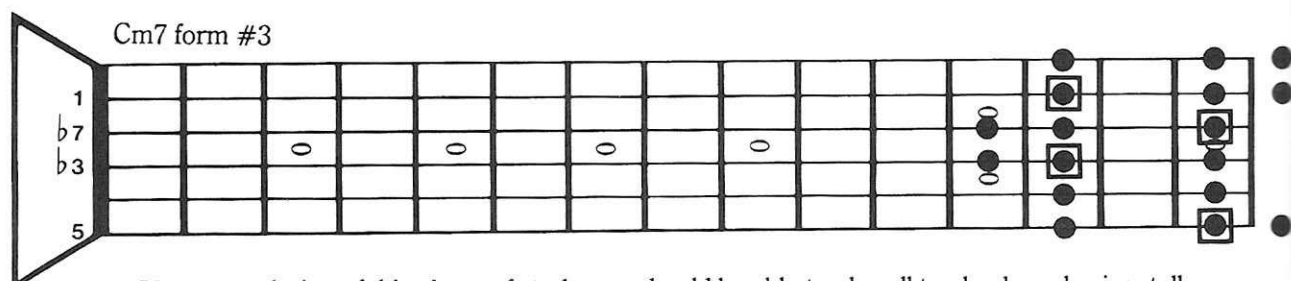
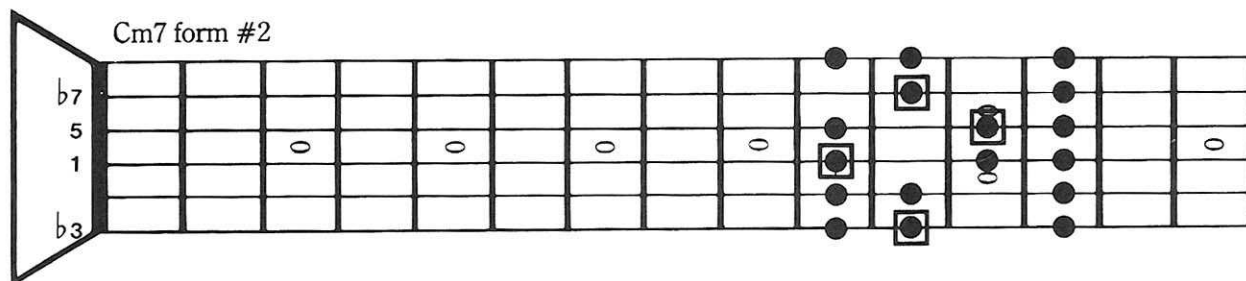
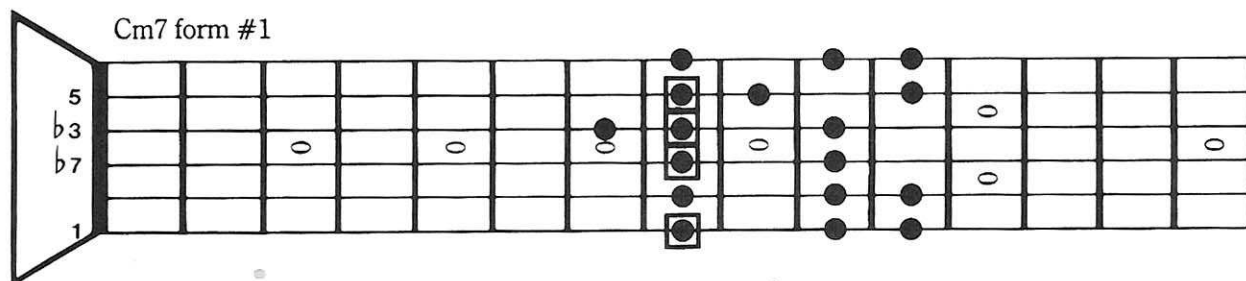
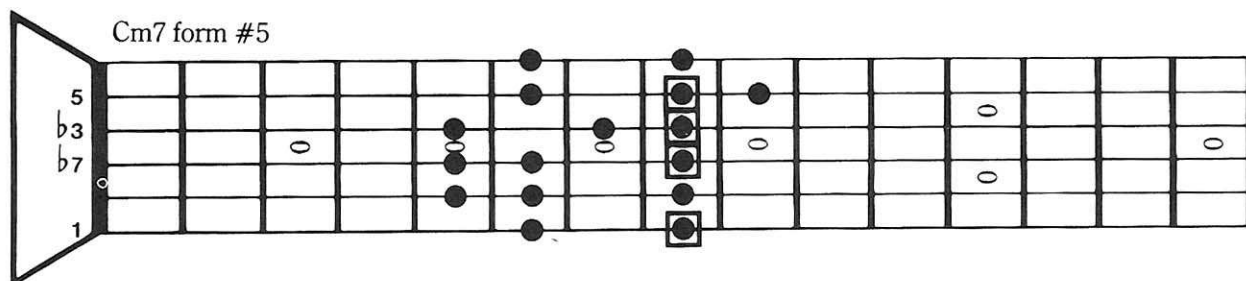
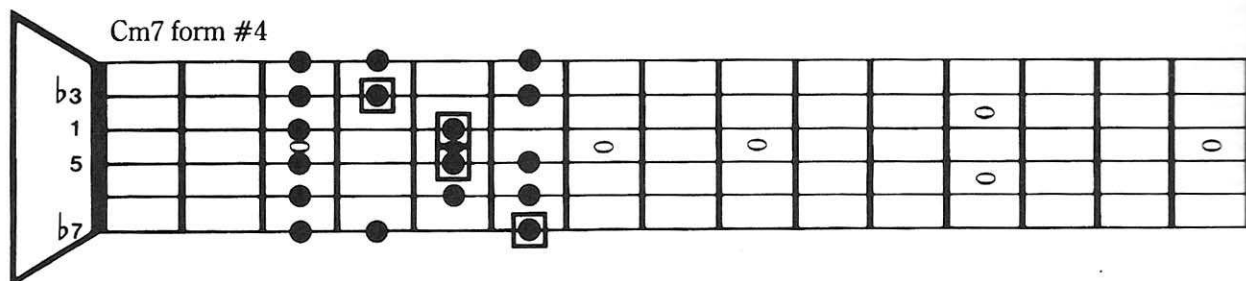


Before moving on to PHASE II, the student should learn to play the remaining eleven keys, horizontally up the fingerboard. To achieve this, simply transpose the four chord forms and five forms of activities either up or down the other eleven keys.

EXAMPLE: Horizontal movement in the key of C minor (Eb major).

1) Locate the four chord inversions and scales.

2) Play the appropriate activity (line form), according to the chord inversion (form 1, 2, 3, etc.).



Upon completion of this phase of study you should be able to play all twelve keys horizontally up the fingerboard. Then and only then should you move onto PHASE II.

# PHASE II: Vertical Movement

## Inversions and Activities in All 12 Keys

Phase II involves transposing the five basic forms of activity learned in Phase I and vertically to locate all twelve keys in one area of the guitar neck.

Remember: Play the chord inversion first, this will indicate the form of activity to be used. (Except in the case of activities 1 & 5 which share the same chord inversion.)

Line form 1: Key of G minor

The musical notation for Line form 1 in G minor consists of two staves. The first staff has a treble clef and a key signature of one flat (F). It contains a sequence of notes with fingerings: 6, 5, 4, 5, 4, 2. The second staff has a bass clef and a key signature of one flat (F). It contains a sequence of notes with fingerings: 1, 2, 1, 2, 3, 2, 3, 4. Below the staves is a Gm7 chord diagram showing the fretboard with fingerings: 2 on the 2nd fret of the 5th string, 3 on the 3rd fret of the 4th string, 3 on the 3rd fret of the 3rd string, and 3 on the 3rd fret of the 2nd string. The chord is labeled Gm7 and the notes are R, b7, b3, 5.

The two guitar fretboard diagrams show the vertical movement of the five basic forms of activity across the neck. The first diagram shows the fretboard from the 1st to the 20th fret. The second diagram shows the fretboard from the 1st to the 20th fret. The diagrams are labeled with numbers 1 through 20, indicating the fret positions for the five basic forms of activity.



Line form 5: Key of Ab minor

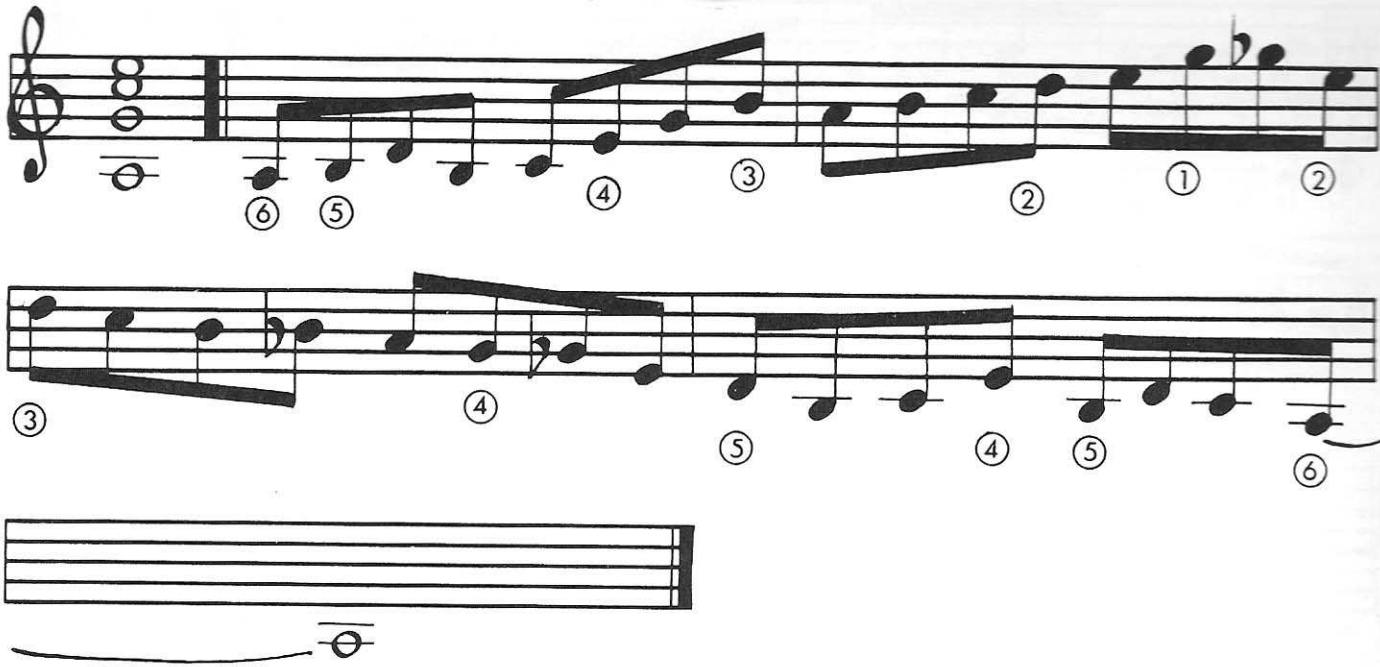
⑥ ⑤ ④ ③ ② ① ②

③ ④ ⑤ ④ ⑤ ⑥

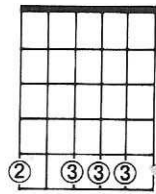
Abm7

R b7 b3 5

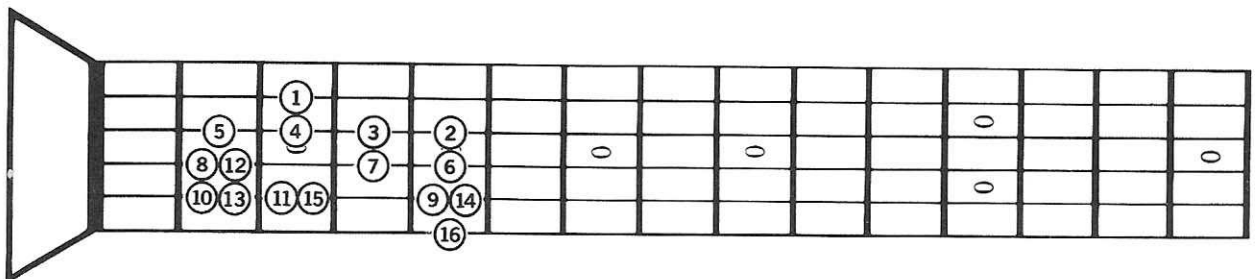
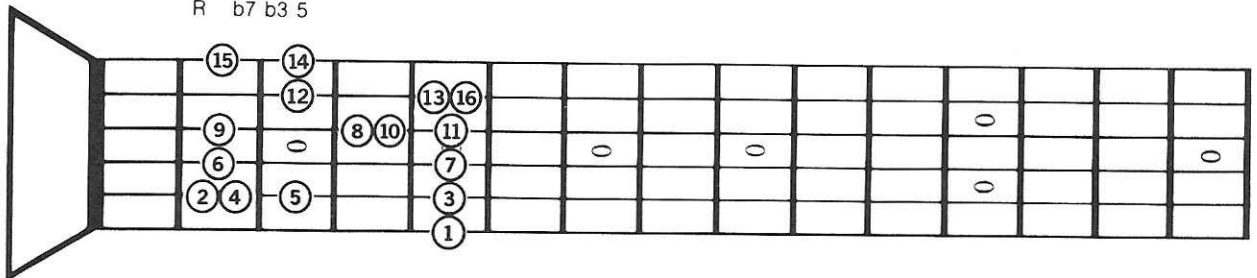
Line form 5: Key of A minor



Am7



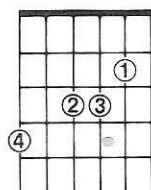
R b7 b3 5



# Line form 4: Key of Bb minor

The musical notation consists of two staves. The first staff contains a sequence of notes with fingerings 5, 4, 3, and 2. The second staff contains a sequence of notes with fingerings 1, 2, 3, 4, and 5. The third staff shows a sequence of notes with fingerings 6, 5, 6, 5, and 6, followed by a curved line indicating a slide or bend.

## Bbm7



b7 5 R b3

A fretboard diagram showing the Bbm7 chord shape. The fretboard is divided into two sections. The first section shows the notes 13, 11, 8, 3, 5, 1, 16, 14, 9, 10, 12, 4, 6, 2, 7. The second section shows the notes 15, 12, 9, 6, 3, 1, 14, 11, 8, 5, 2, 1, 16, 14, 9, 10, 12, 4, 6, 2, 7.

A fretboard diagram showing the Bbm7 chord shape. The fretboard is divided into two sections. The first section shows the notes 3, 9, 11, 13, 15, 21, 24, 1, 8, 10, 19, 17, 22, 20, 18, 23, 5, 7, 12, 14, 16, 2, 6, 4, 16, 14, 9, 10, 12, 4, 6, 2, 7.

Line form 4: Key of B minor

The musical notation consists of three staves. The first staff is in treble clef with a key signature of one sharp (F#). It contains a melodic line with fingerings 6, 5, 4, 3, 4, 3, 2. The second staff is in bass clef with a key signature of one sharp (F#). It contains a melodic line with fingerings 1, 2, 1, 2, 3, 4, 5. The third staff is in bass clef with a key signature of one sharp (F#). It contains a melodic line with fingerings 6, 5, 6, 5, 6, and a final whole note chord with a sharp sign.

Bm7

A diagram showing the fingering for the Bm7 chord. It is a 4x4 grid with fingers 1, 2, 3, and 4 placed on the strings.

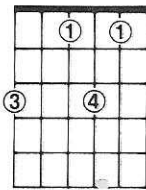
b7 5 R b3

A diagram showing the fretboard layout for the Bm7 chord. The fretboard is divided into four sections, each with a different fingering pattern. The first section shows the Bm7 chord shape with fingerings 13, 11, 14, 15, 8, 9, 10, 12, 3, 5, 4, 6, 7, 1, 2.

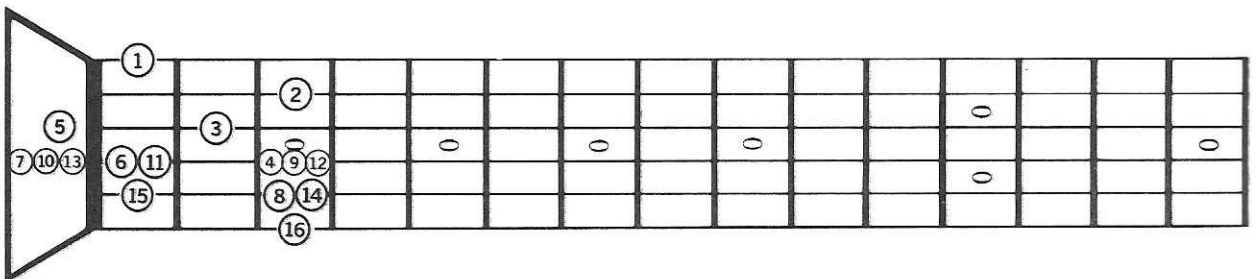
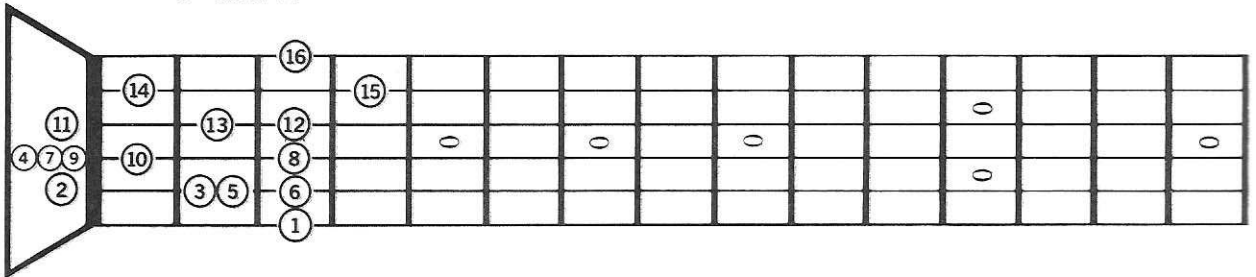
A diagram showing the fretboard layout for the Bm7 chord. The fretboard is divided into four sections, each with a different fingering pattern. The first section shows the Bm7 chord shape with fingerings 3, 7, 9, 11, 13, 15, 21, 24, 1, 8, 10, 5, 12, 14, 17, 22, 20, 4, 2, 6, 16, 18, 23.

# Line form 3: Key of C minor

## Cm7

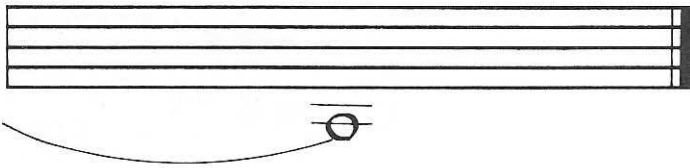
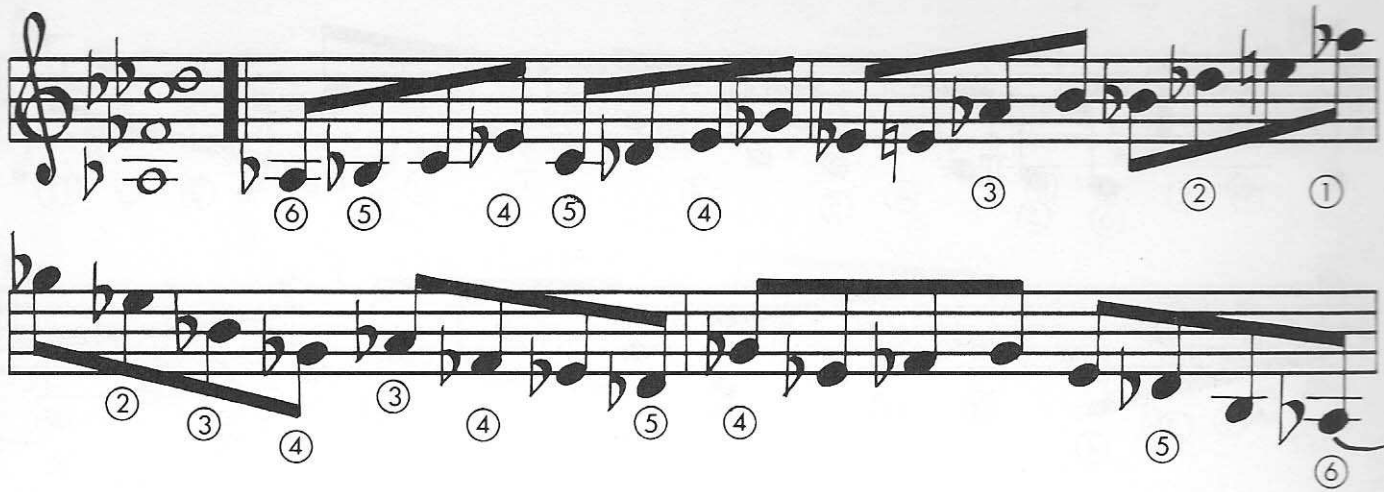


5 b3 b7 R

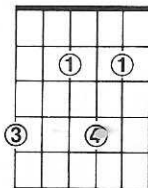




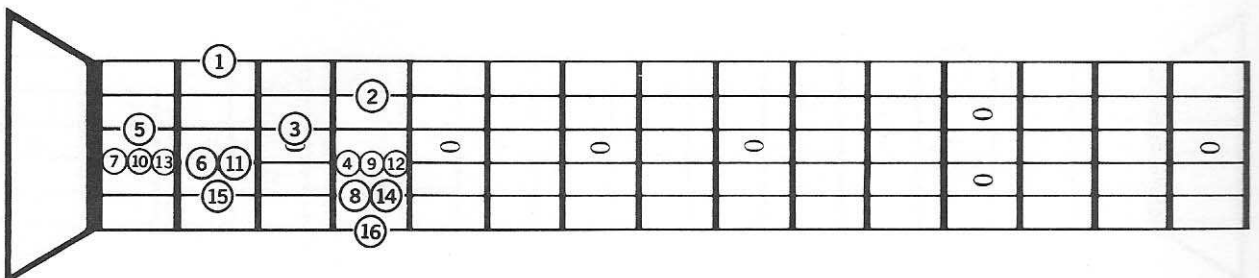
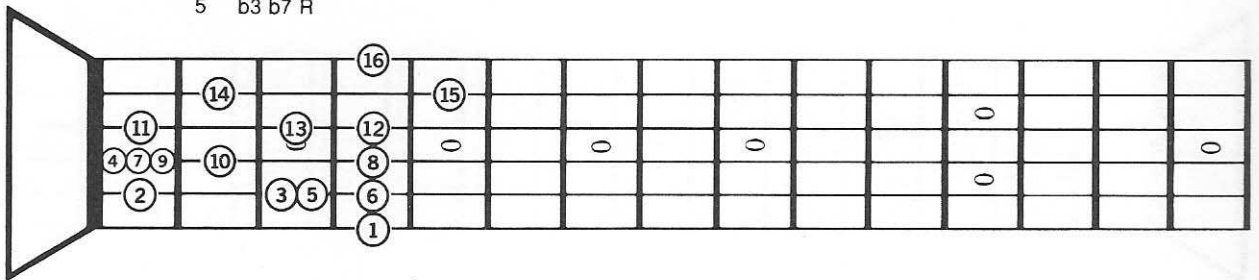
Line form 3: Key of Db minor



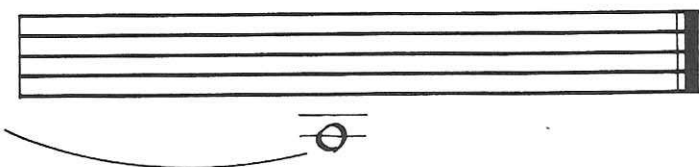
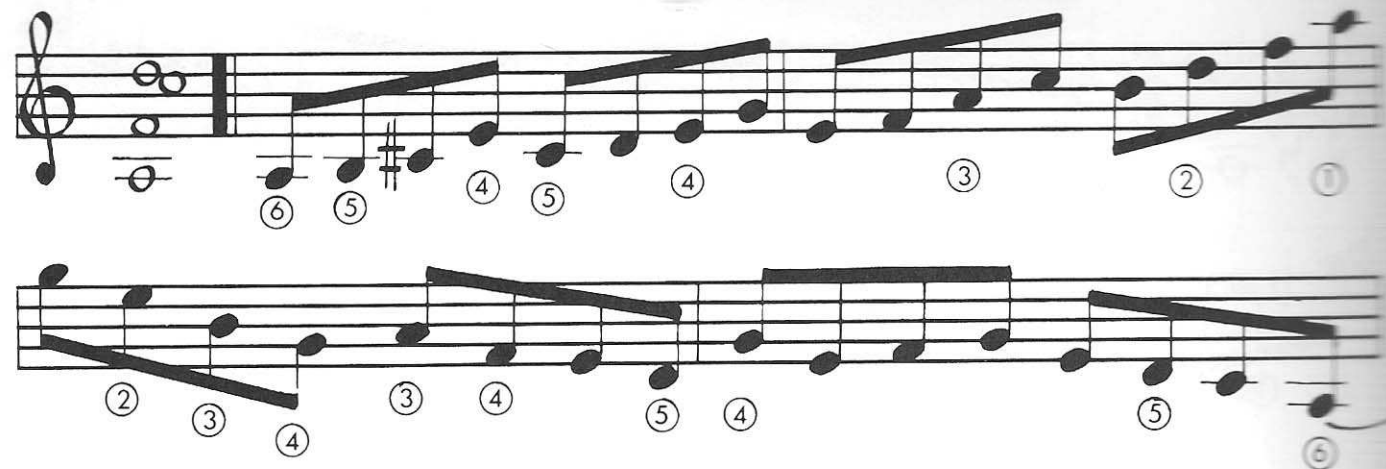
Dbm7



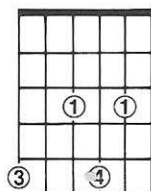
5 b3 b7 R



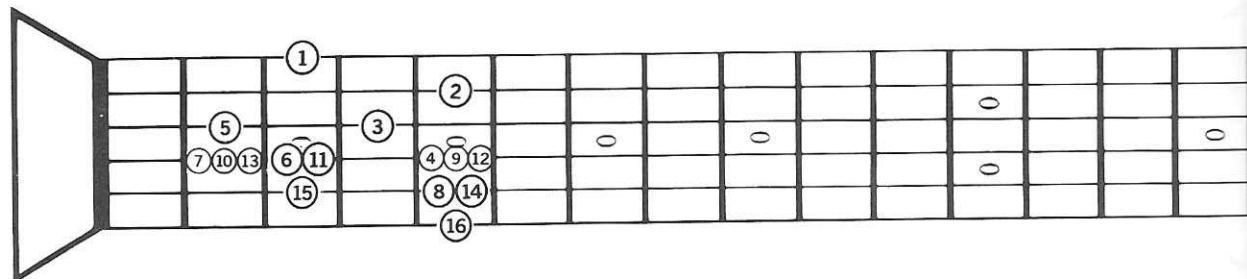
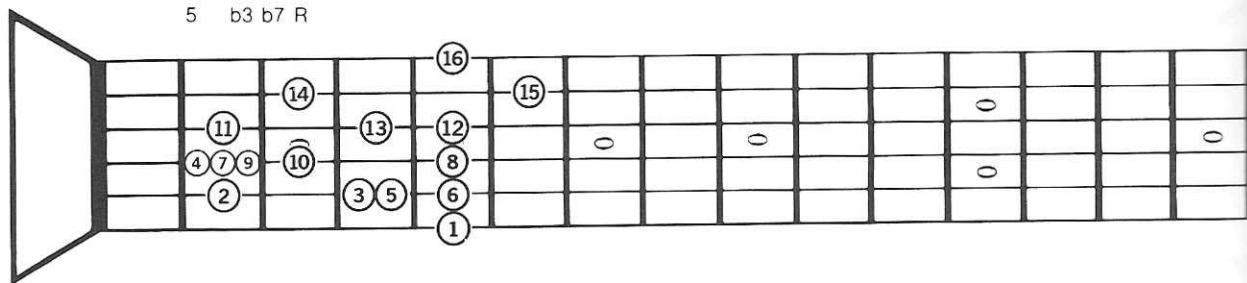
# Line form 3: Key of D minor



## Dm7

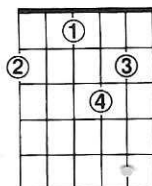


5 b3 b7 R



The musical notation consists of three staves. The first staff is in treble clef with a key signature of two flats (Bb and Eb). It contains a series of eighth and sixteenth notes, with fingerings 6, 5, 4, 3, 2, 1 indicated below. The second staff is in bass clef with the same key signature, containing similar rhythmic patterns with fingerings 3, 2, 1, 2, 3, 4, 5, 4, 5 indicated below. The third staff is a single line of music with fingerings 4 and 5 indicated below.

### Ebm7

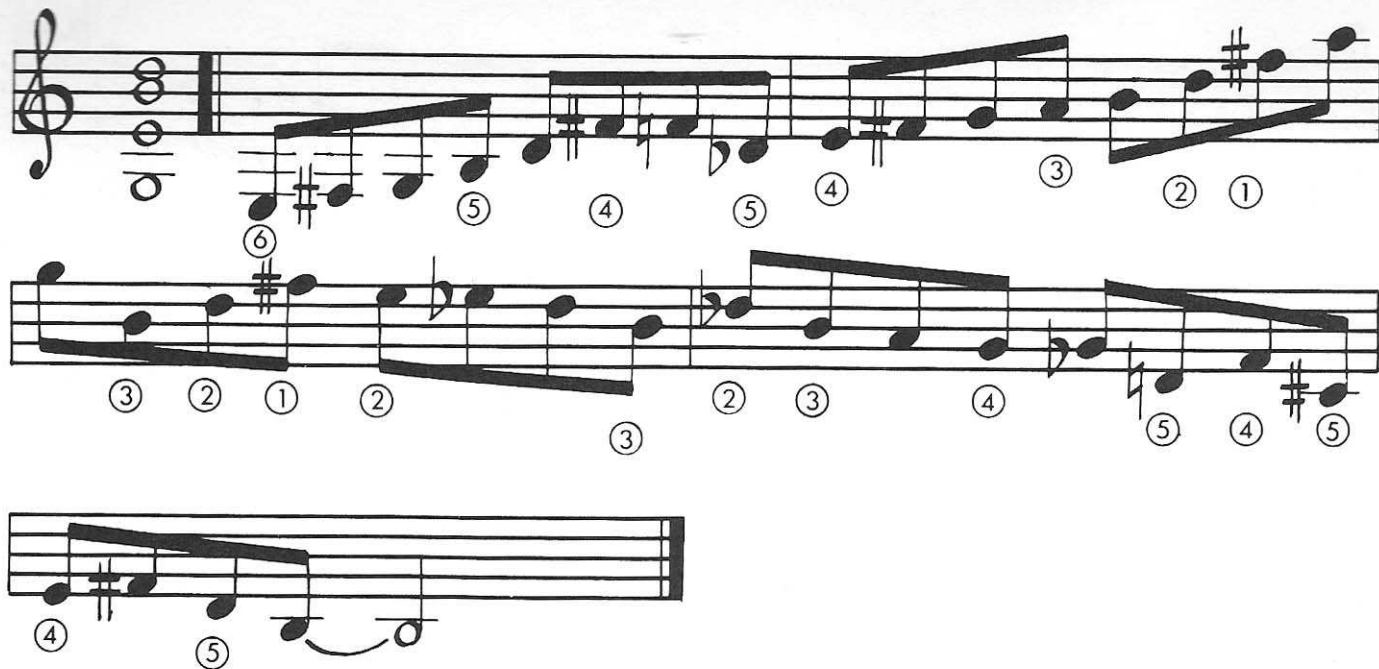


b3 R 5 b7

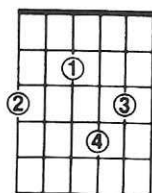
A diagram of a guitar fingerboard showing the frets from 1 to 16. The strings are numbered 1 to 6 from bottom to top. Fingering circles are placed on the fretboard to indicate the positions for the Ebm7 chord: 1 on the 1st fret (string 1), 2 on the 2nd fret (string 2), 3 on the 3rd fret (string 3), 4 on the 4th fret (string 4), 5 on the 5th fret (string 5), 6 on the 6th fret (string 6), 7 on the 7th fret (string 1), 8 on the 8th fret (string 2), 9 on the 9th fret (string 3), 10 on the 10th fret (string 4), 11 on the 11th fret (string 5), 12 on the 12th fret (string 6), 13 on the 13th fret (string 1), 14 on the 14th fret (string 2), 15 on the 15th fret (string 3), and 16 on the 16th fret (string 4).

A second diagram of a guitar fingerboard showing the frets from 1 to 16. The strings are numbered 1 to 6 from bottom to top. Fingering circles are placed on the fretboard to indicate the positions for the Ebm7 chord: 1 on the 1st fret (string 1), 2 on the 2nd fret (string 2), 3 on the 3rd fret (string 3), 4 on the 4th fret (string 4), 5 on the 5th fret (string 5), 6 on the 6th fret (string 6), 7 on the 7th fret (string 1), 8 on the 8th fret (string 2), 9 on the 9th fret (string 3), 10 on the 10th fret (string 4), 11 on the 11th fret (string 5), 12 on the 12th fret (string 6), 13 on the 13th fret (string 1), 14 on the 14th fret (string 2), 15 on the 15th fret (string 3), and 16 on the 16th fret (string 4).

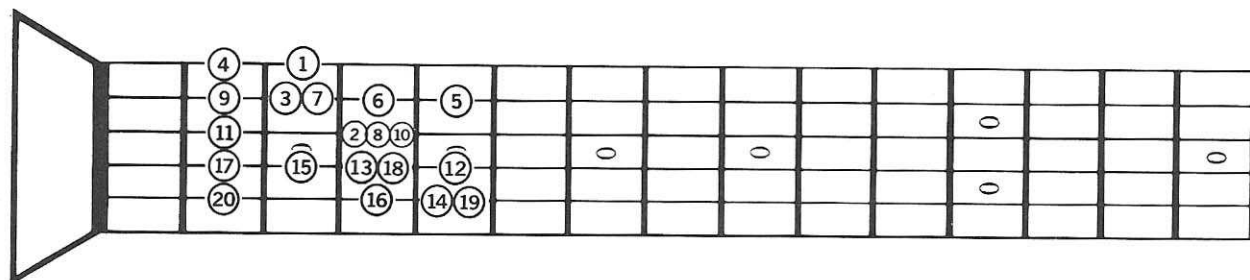
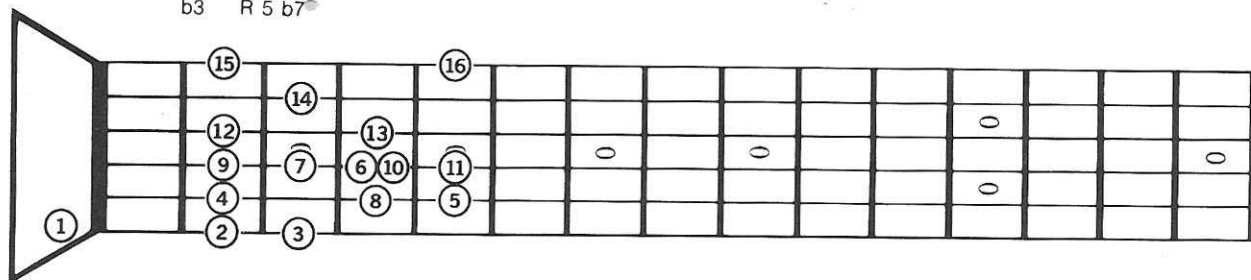
Line form 2: Key of E minor



Em7

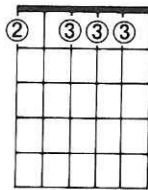


b3 R 5 b7

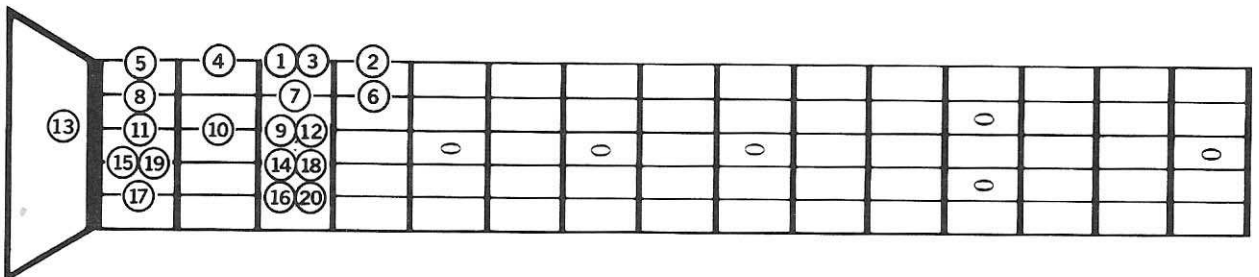
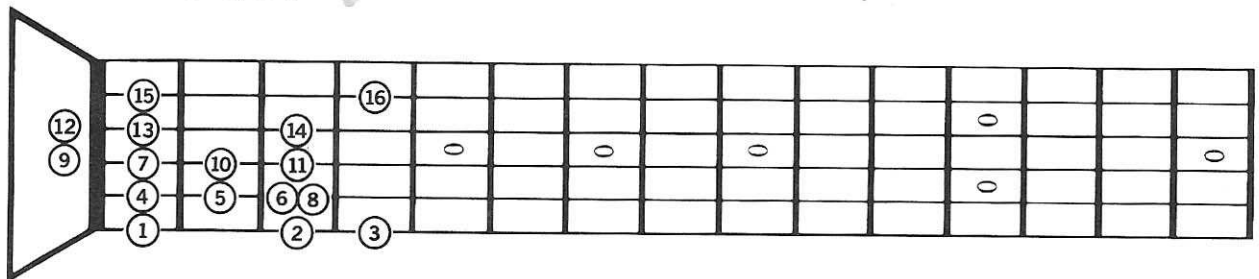


The musical notation consists of two staves. The first staff begins with a treble clef and a key signature of two flats (Bb and Eb). The melody is written in eighth and quarter notes, with fingerings indicated by circled numbers 1 through 5. The second staff continues the melody, also with fingerings 1 through 5. A third, shorter staff at the bottom shows a continuation of the melody with fingerings 4 and 5.

**Fm7**



R b7 b3 5

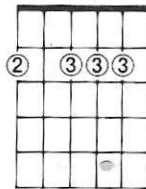




Line form 1: Key of Gb minor

Musical notation for Line form 1 in Gb minor. The treble staff begins with a key signature of two flats (Bb, Eb) and a common time signature. The melody consists of eighth and quarter notes, with fingerings indicated by circled numbers 1 through 6. The bass staff provides a harmonic accompaniment with eighth and quarter notes, also featuring numbered fingerings 1 through 4. A final short phrase is shown below the bass staff with a circled 5.

Gbm7



R b7 b3 5

Fingerboard diagram for the first hand (treble clef). The diagram shows a 6x12 grid. Fingering numbers are placed in the first four frets: Fret 1 (12, 14, 9), Fret 2 (16, 15, 7, 4, 1), Fret 3 (10, 5, 8), and Fret 4 (13, 11, 6, 2). Open circles are shown in the 5th, 6th, 7th, 8th, and 9th frets.

Fingerboard diagram for the second hand (bass clef). The diagram shows a 6x12 grid. Fingering numbers are placed in the first four frets: Fret 1 (10, 13, 15), Fret 2 (5, 8, 12, 11, 14, 17, 19), Fret 3 (3), and Fret 4 (2, 4, 7, 1, 6, 9, 16, 18, 20). Open circles are shown in the 5th, 6th, 7th, 8th, and 9th frets.

# PHASE III: Vertical and Horizontal Movement

## Line Studies

Phase III deals with the transposition and connection of the five basic forms of activity, resulting in ten continuous, linear improvisations. (Hereinafter to be referred to as line studies.)

Each line study is twenty four to twenty eight bars in length and will demonstrate the linear movement of the five forms of activity through all twelve keys. Each form of activity is the basis of two different line studies. The line studies will move horizontally up the fingerboard according to their respective starting line forms, facilitating total command and access to every key center, anywhere on the instrument.

### LINE STUDY 1A

**Gm7**

1 3 4 1 2 3 1 3 1 3 4 1 2 4 1 4

⑥ ⑤ ④ ⑤ ④ ③ ②

**Abm7**

1 3 4 1 2 3 1 4 3 1 3 1 1 4 2 1

① ② ③ ④

**Am7**

1 4 3 1 2 1 4 3 1 3 4 2 4 2 1 2

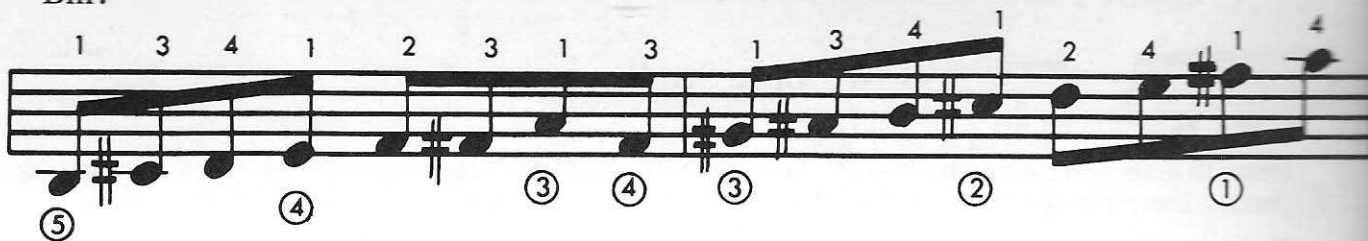
⑤ ④ ⑤ ② ① ②

**Bbm7**

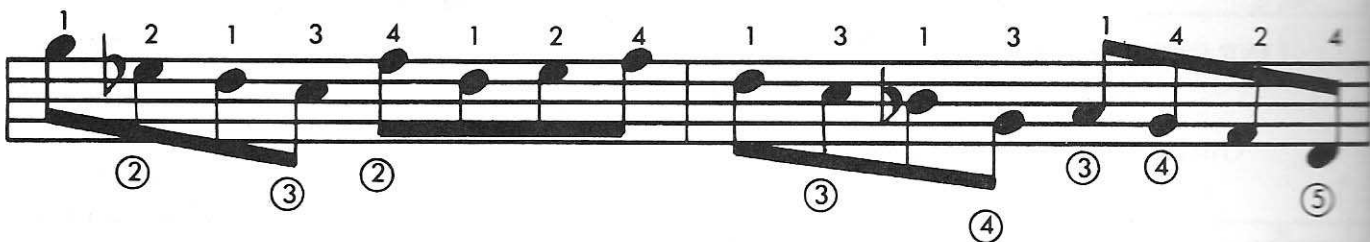
1 2 1 3 4 3 2 4 1 3 1 3 1 4 3 1

① ② ③ ② ③ ④ ⑤

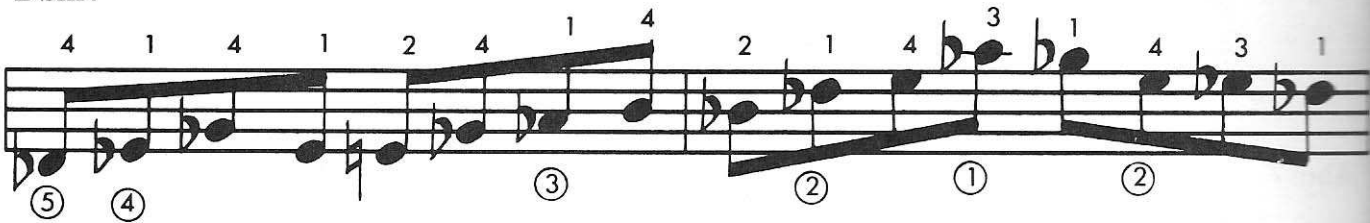
## Bm7



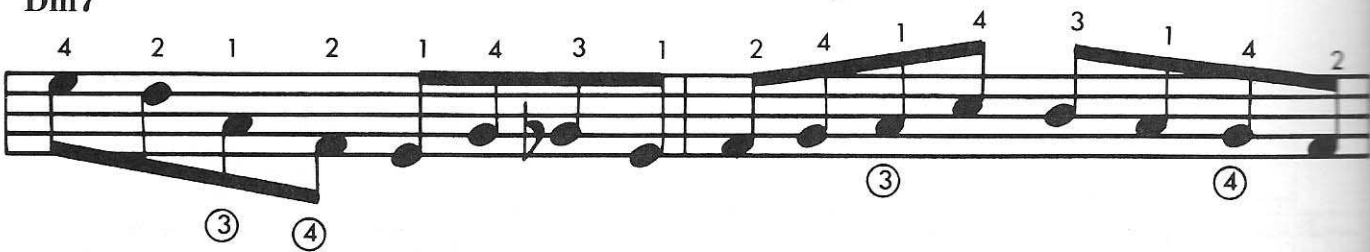
## Cm7



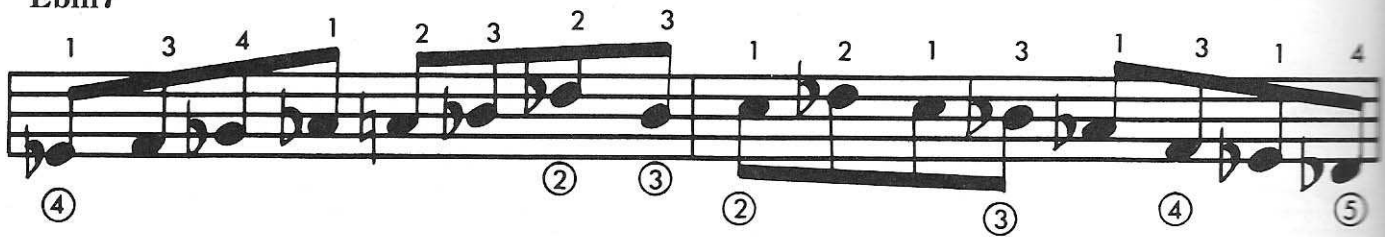
## Dbm7



## Dm7



## Ebm7

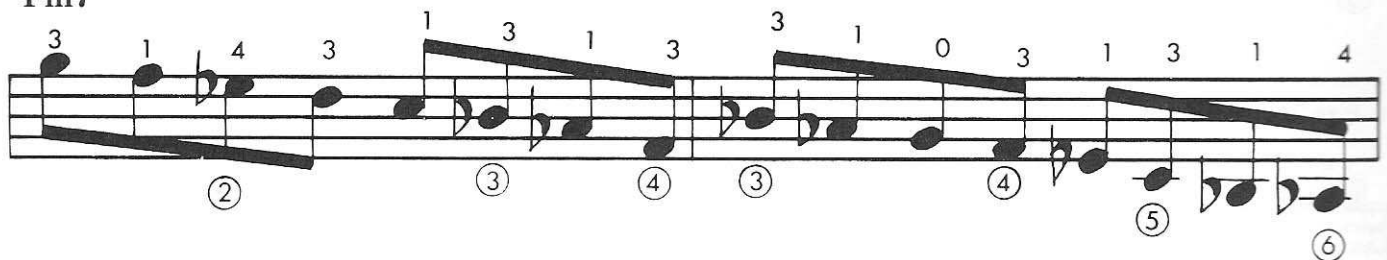


Em7

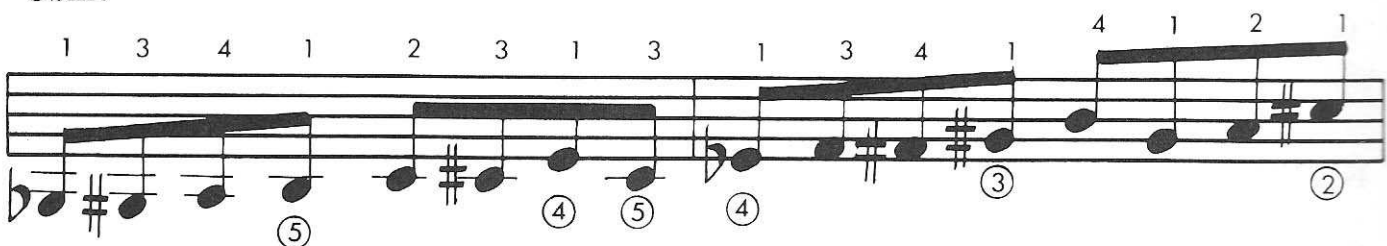
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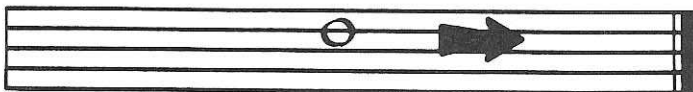
Fm7



Gbm7



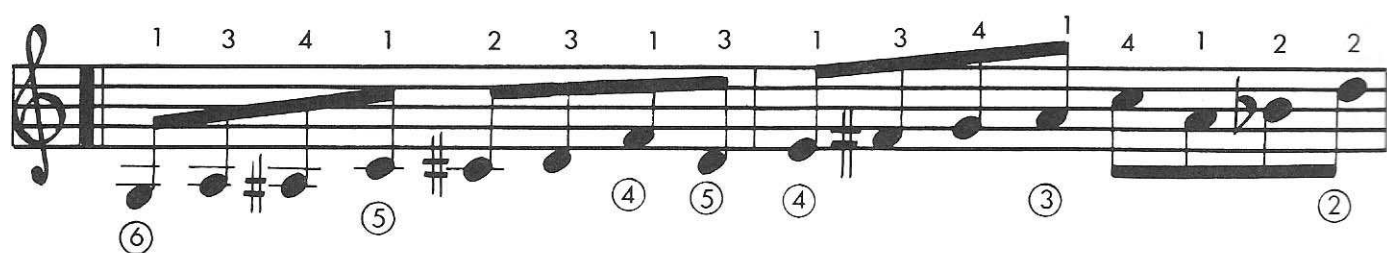
Gm7



At the end of this line study, you will notice an arrow. This merely suggests that the line study can continue onward, starting again on a G minor chord.

### LINE STUDY 1B

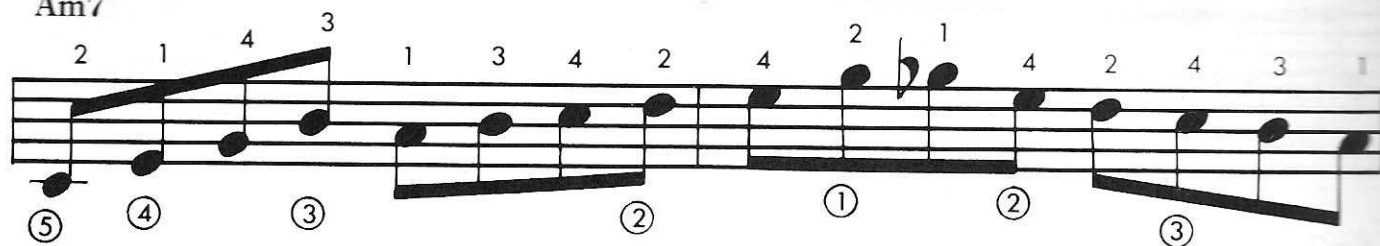
Gm7



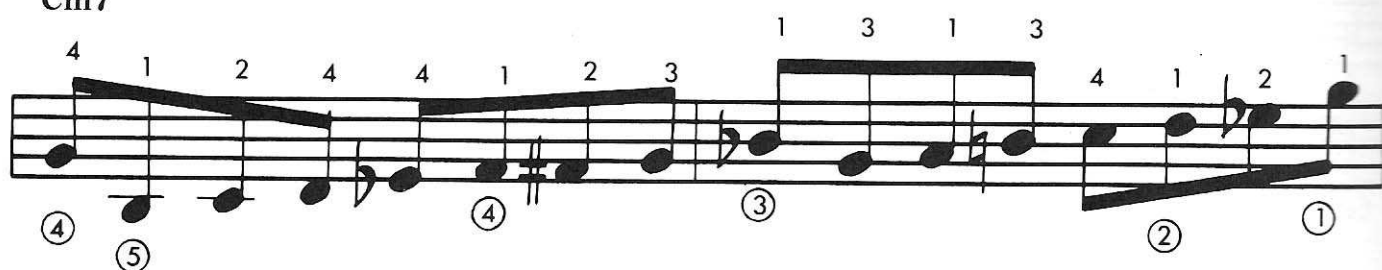
Bbm7



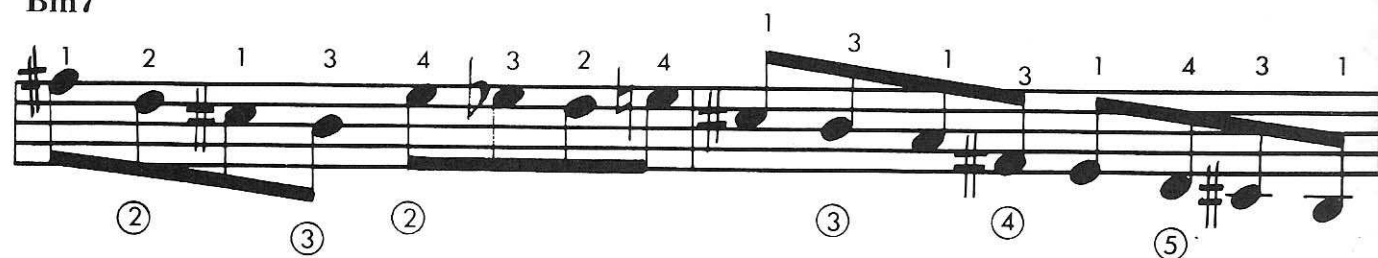
Am7



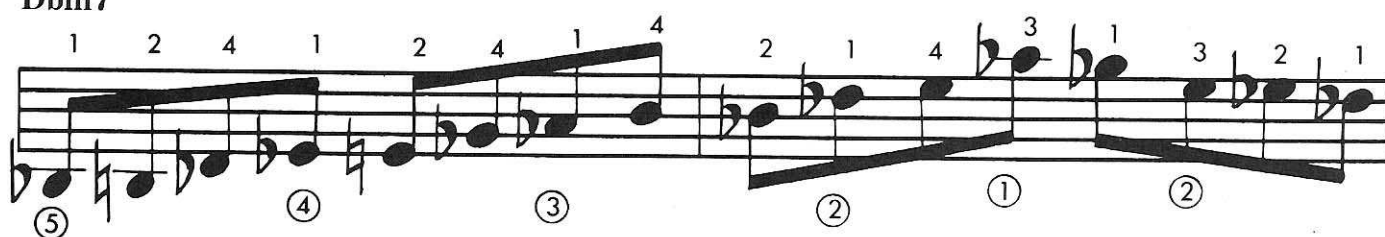
Cm7



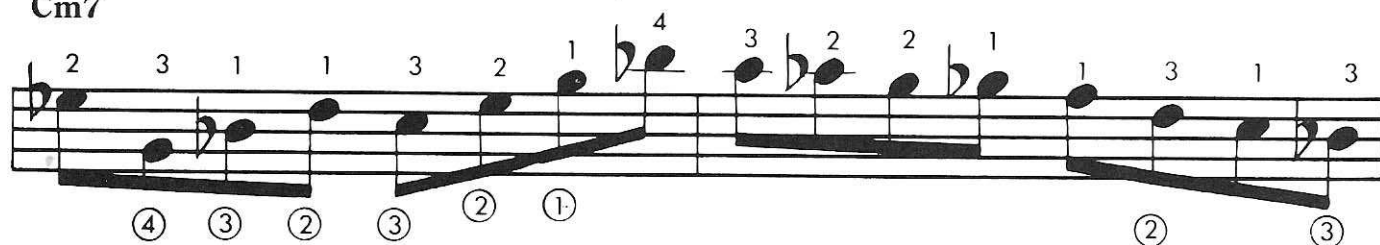
Bm7



Dbm7



Cm7

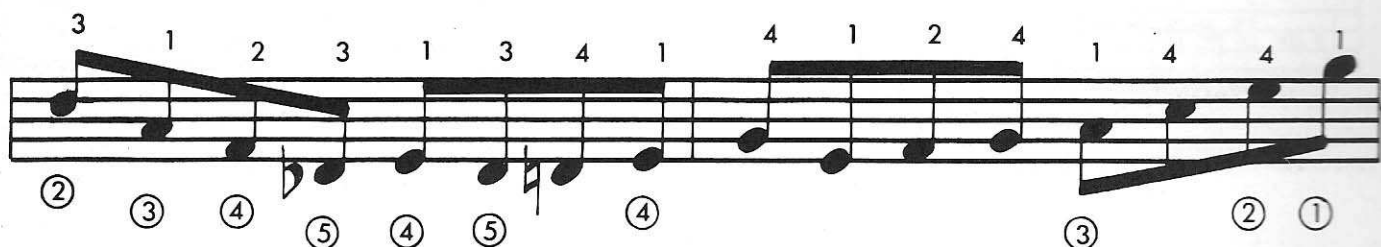




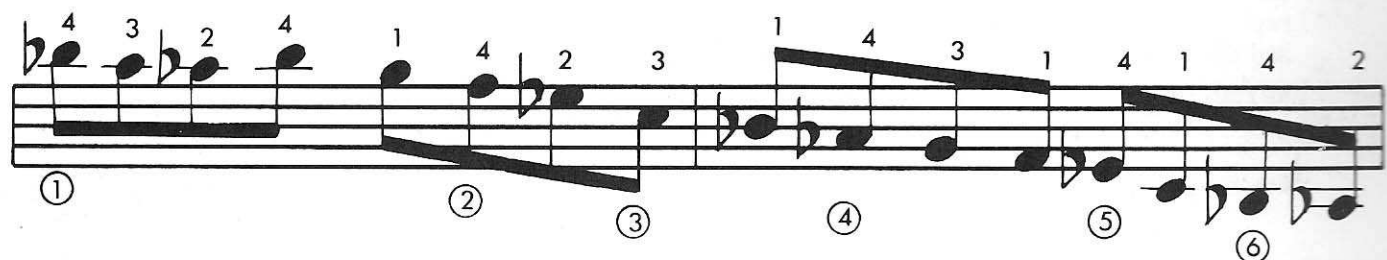
Ebm7



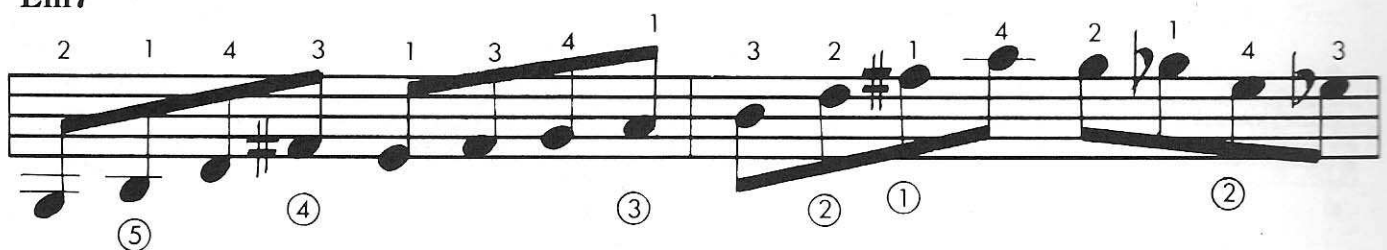
Dm7



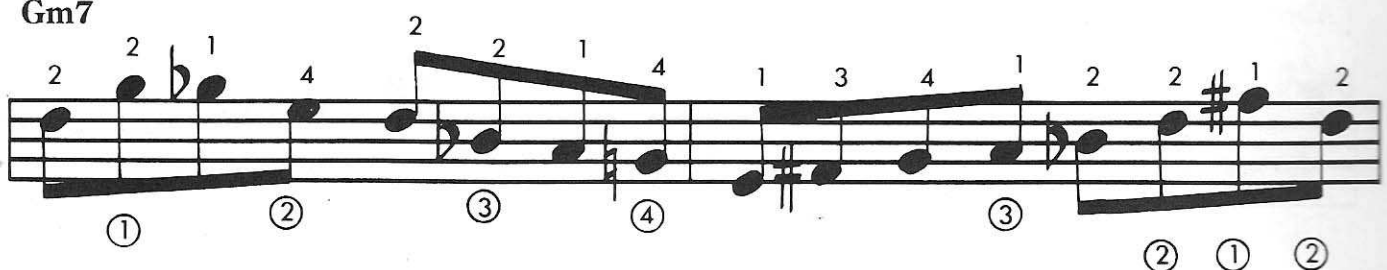
Fm7



Em7



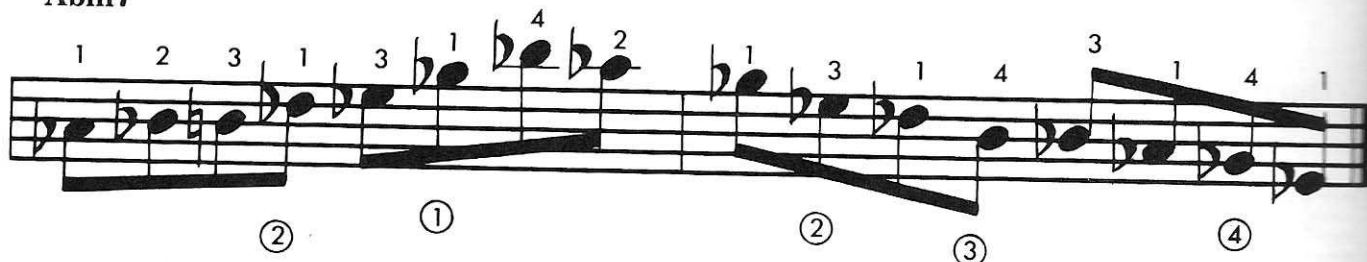
Gm7



# Gbm7



# Abm7



You have now completed line studies 1A and 1B. As you have already realized by now, line studies 1A and 1B are both started from the first form of activity in G minor. Both line studies were located on the lower-most region of the fingerboard (as have most of the melodic exercises up until now). Starting with line studies 2A and 2B, the line studies will ascend up the fingerboard with each successive set of line studies.

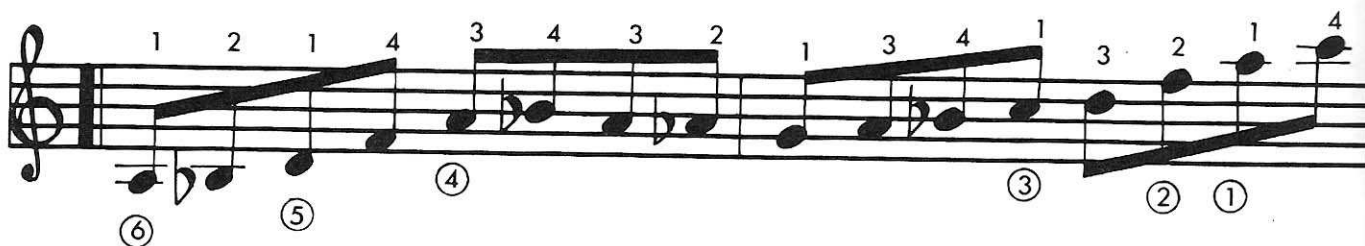
NOTE: The same two chord progressions will be utilized for the remaining line studies, according to letter.

i.e.: Line studies 1A, 2A, 3A, 4A and 5A will share the same chord progression. The same holds true for the "B" studies.

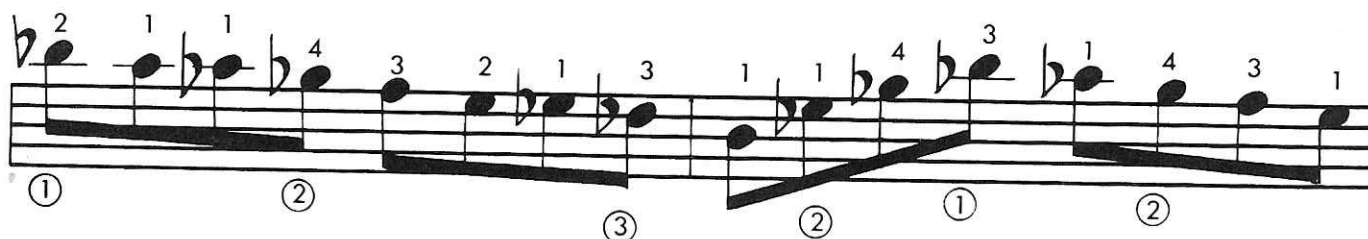
Line studies 2A and 2B start with the second form of activity in G minor.

## LINE STUDY 2A

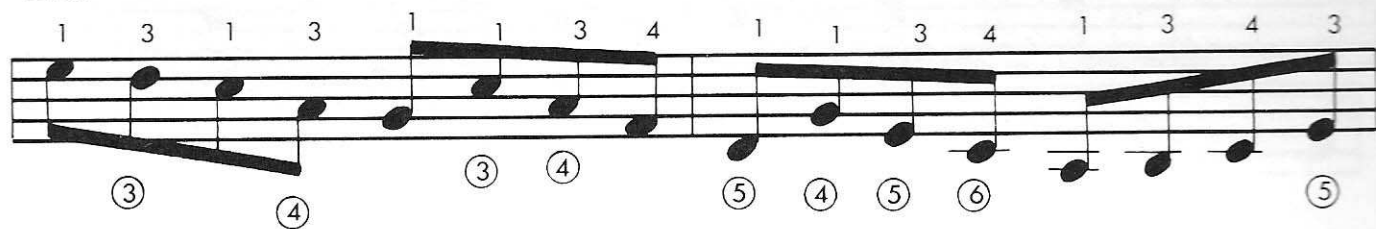
### Gm7



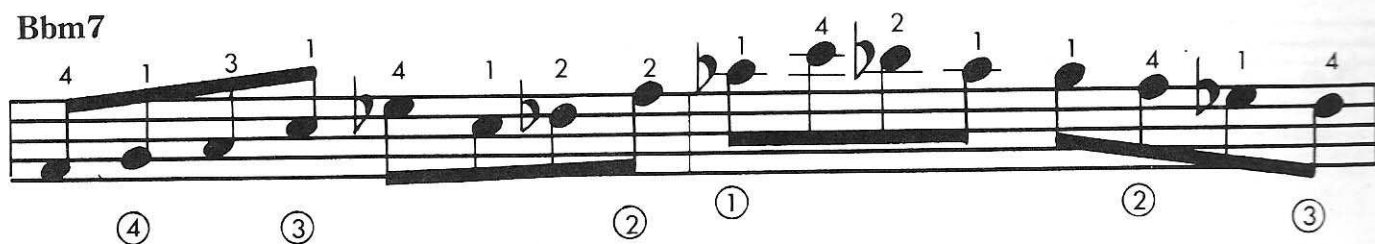
### Abm7



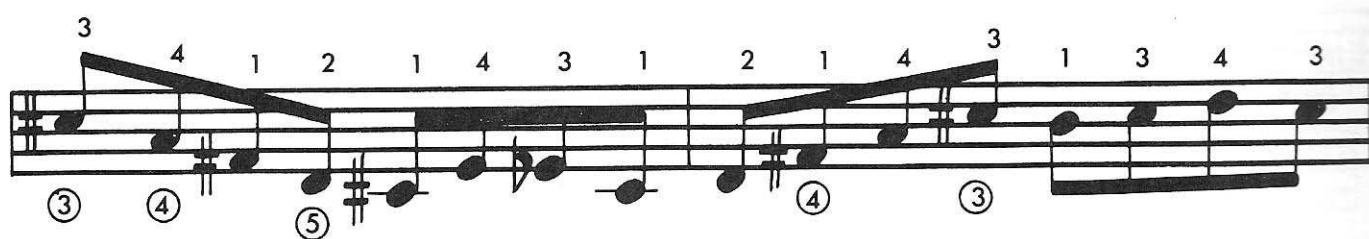
Am7



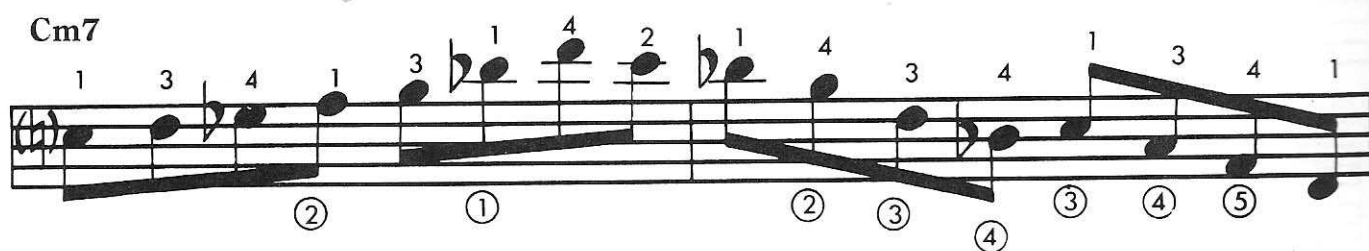
Bbm7



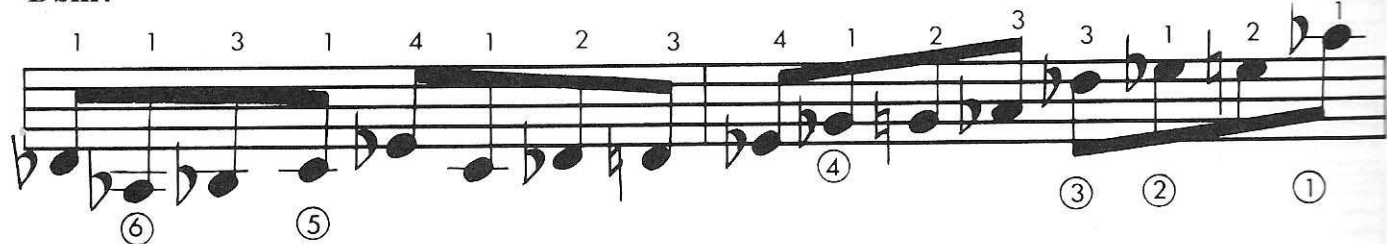
Bm7



Cm7



Dbm7

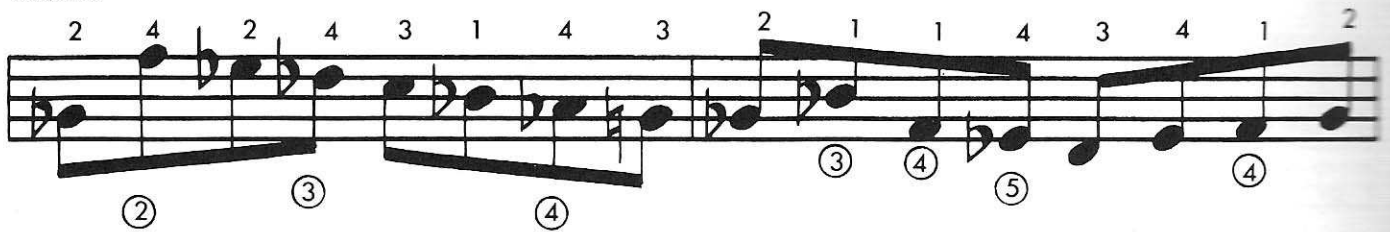


(2A cont.)

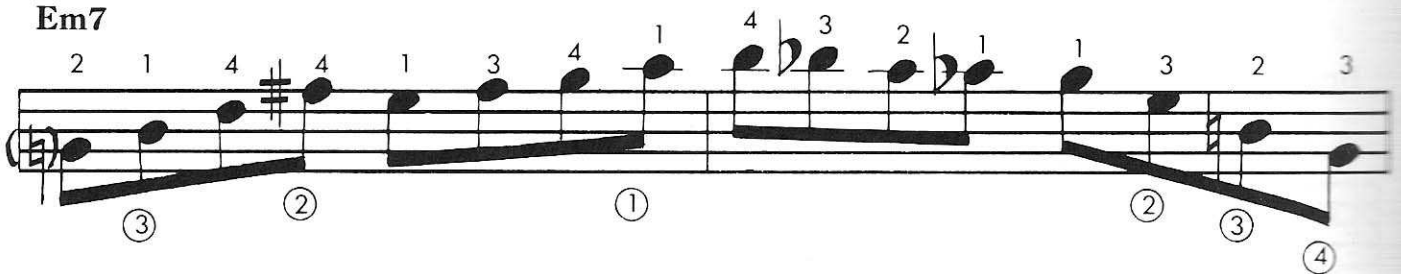
Dm7



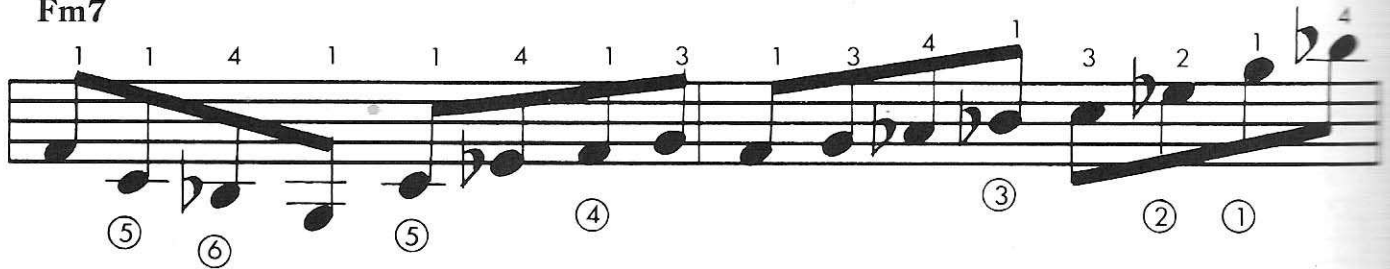
Ebm7



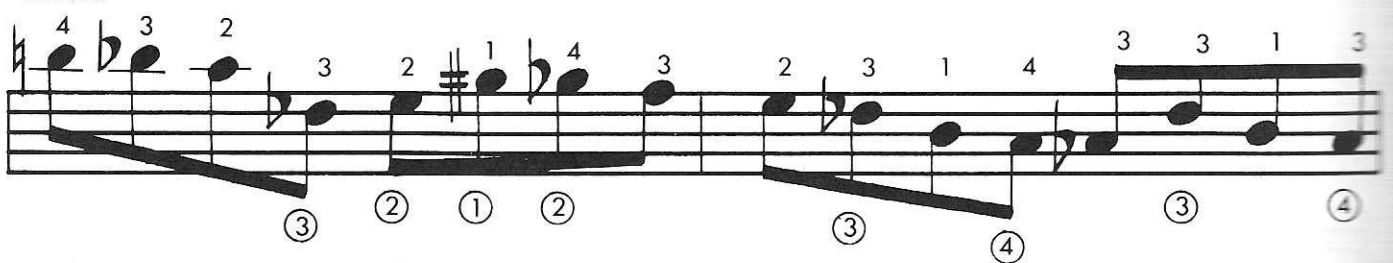
Em7



Fm7



Gbm7



Gm7

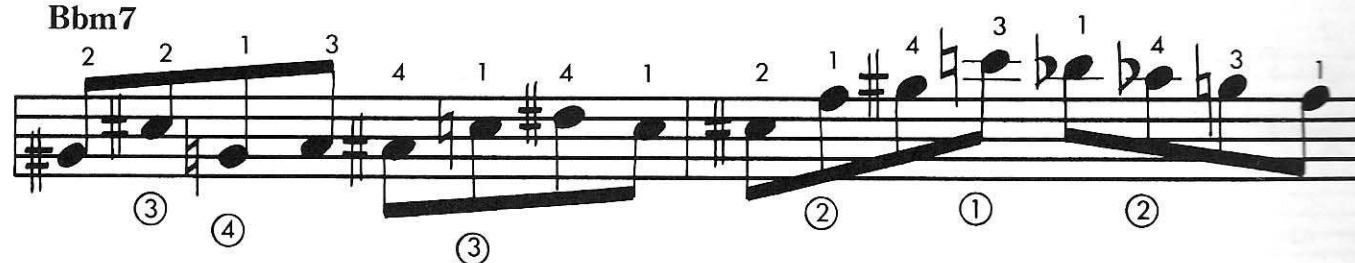


# LINE STUDY 2B

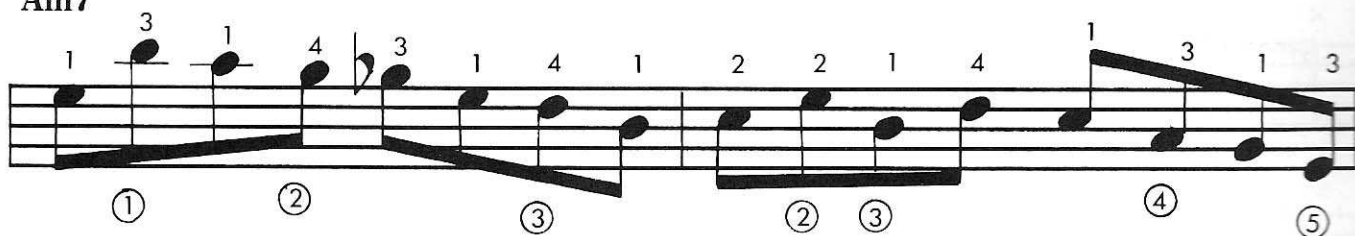
Gm7



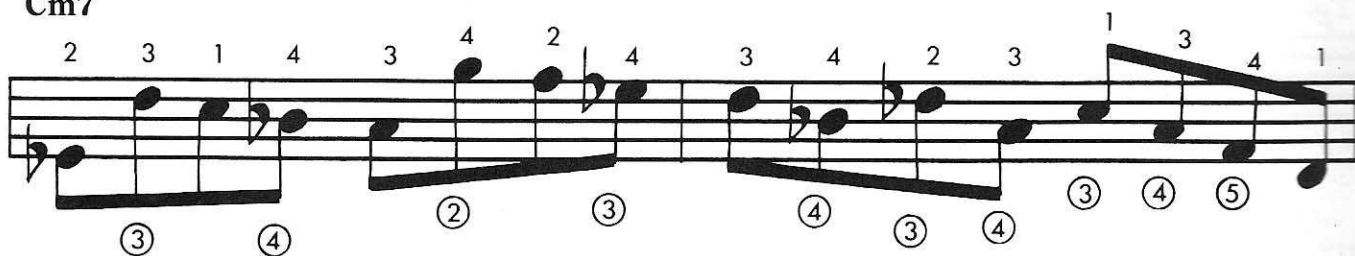
Bbm7



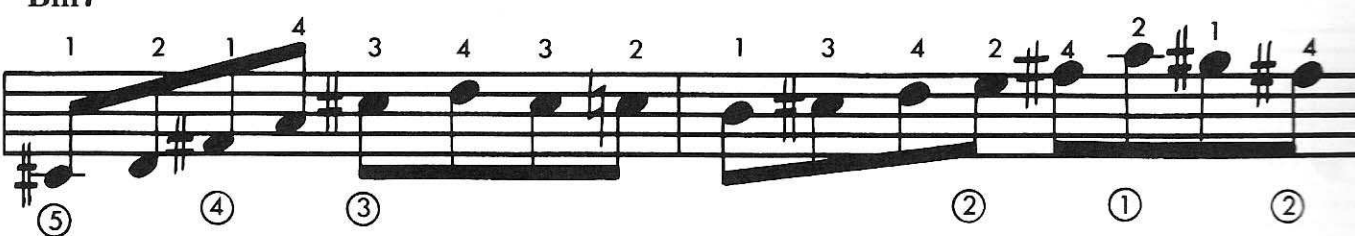
Am7



Cm7

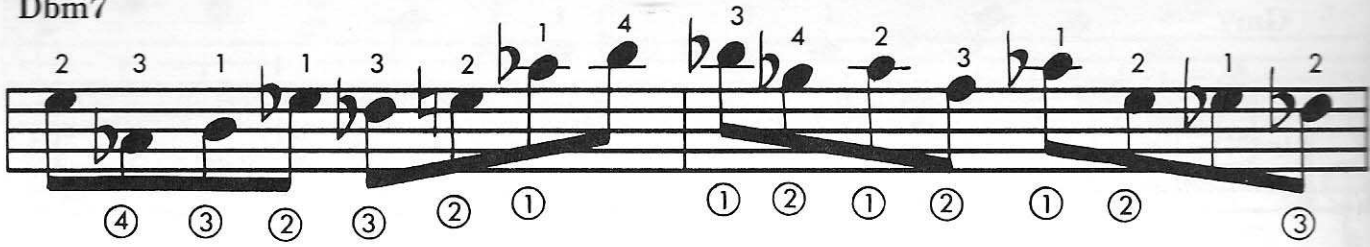


Bm7

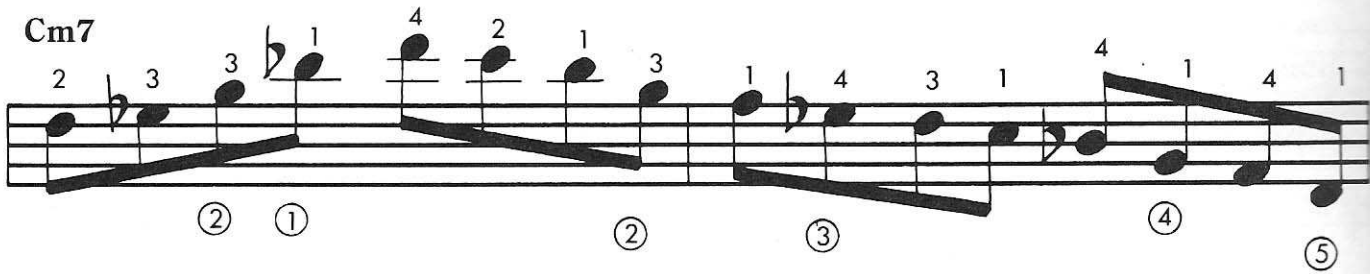




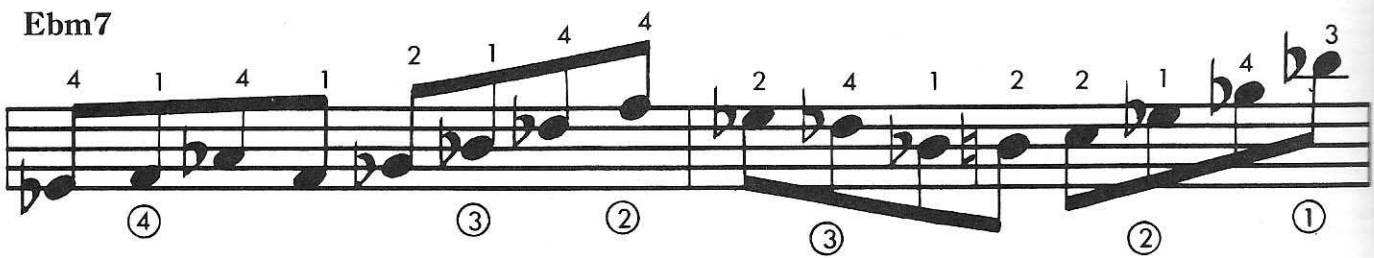
**Dbm7**



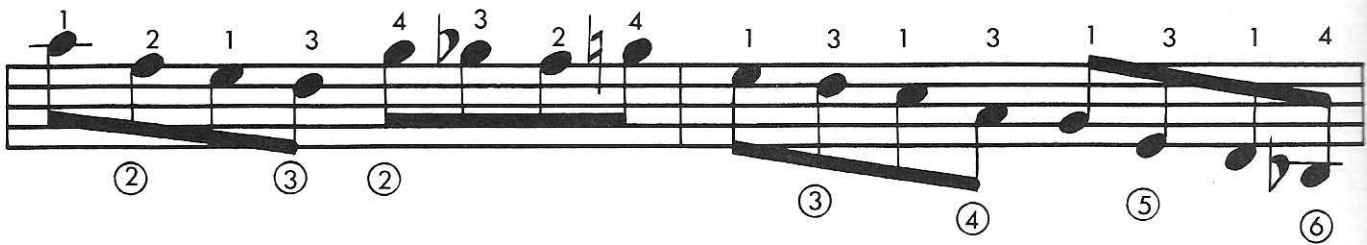
**Cm7**



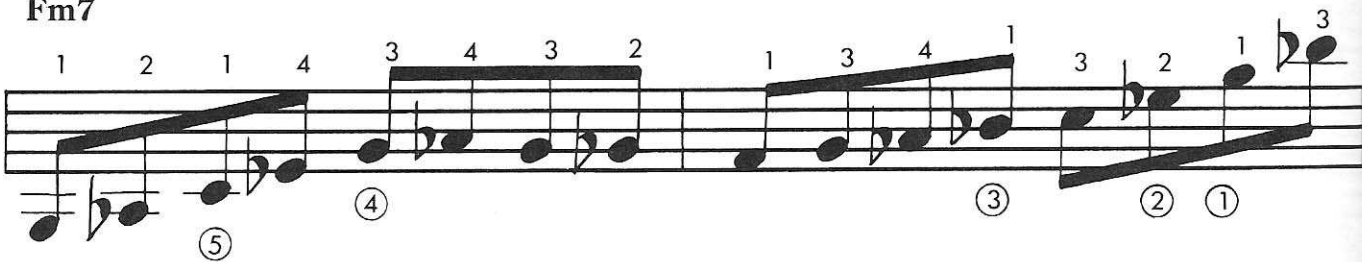
**Ebm7**



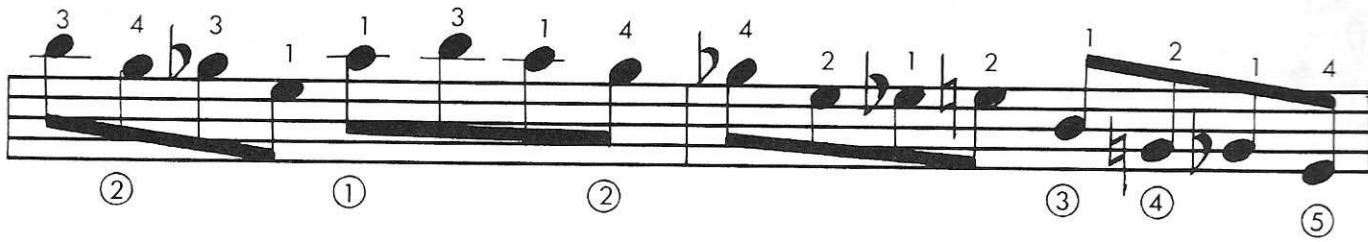
**Dm7**



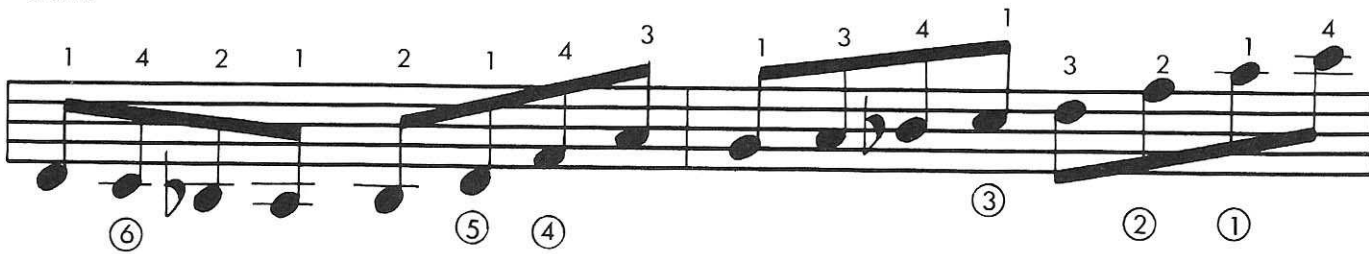
**Fm7**



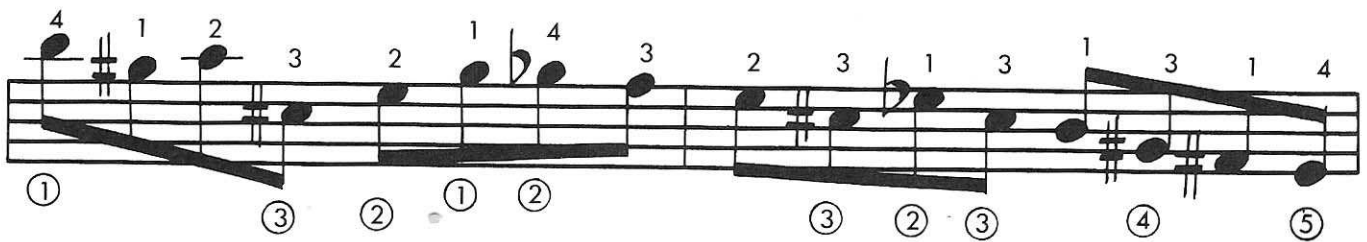
## Em7



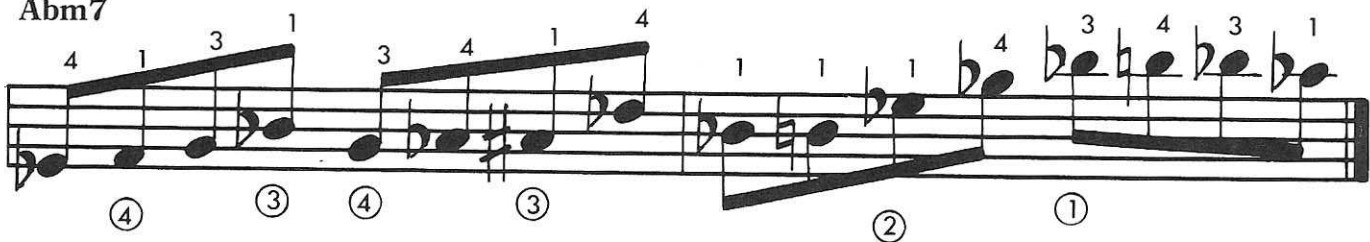
## Gm7



## F#m7



## Abm7



Line studies 3A and 3B start with the third form of activity in G minor.

### LINE STUDY 3A

**Gm7**

① ② ① ② ③ ④ ③ ④ ⑤ ④

**Abm7**

⑤ ⑥ ⑤ ④ ③ ② ①

**Am7**

③ ② ① ② ③ ② ③ ④

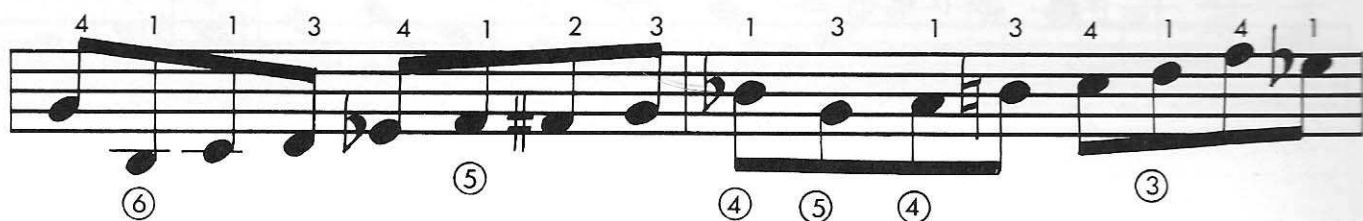
**Bbm7**

⑤ ⑥ ⑤ ④ ③ ②

**Bm7**

③ ① ② ③ ② ③ ④ ③ ④ ⑤

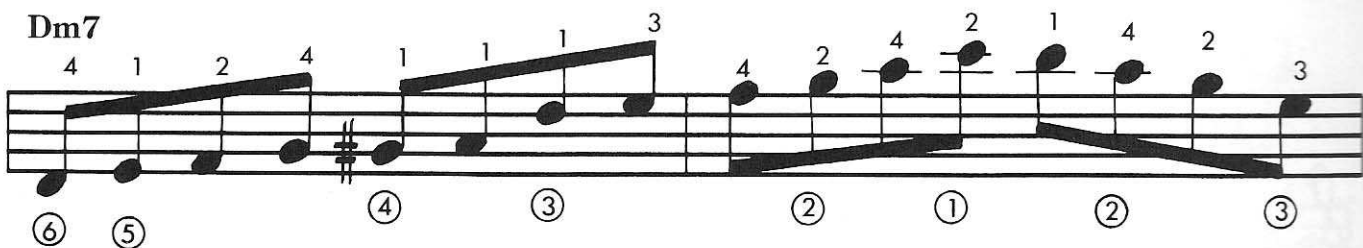
Cm7



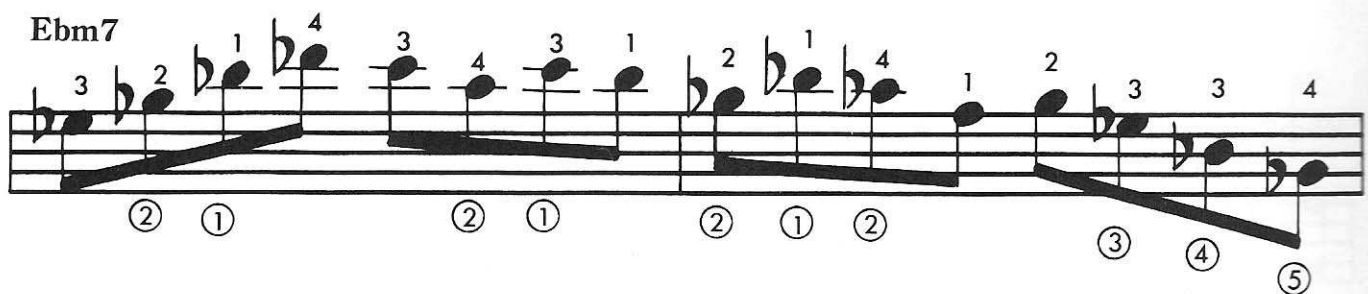
Dbm7



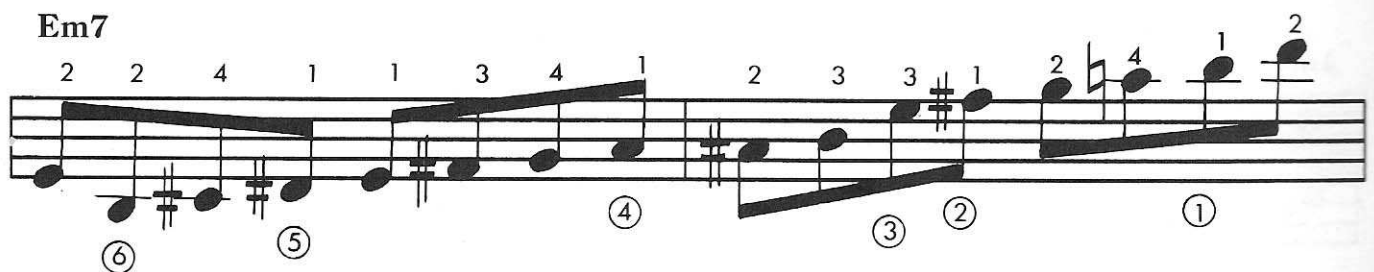
Dm7



Ebm7



Em7

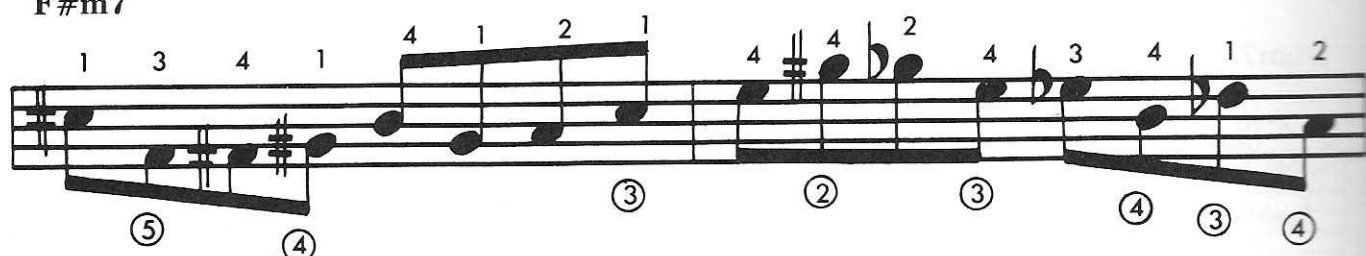


(3A cont.)

Fm7



F#m7

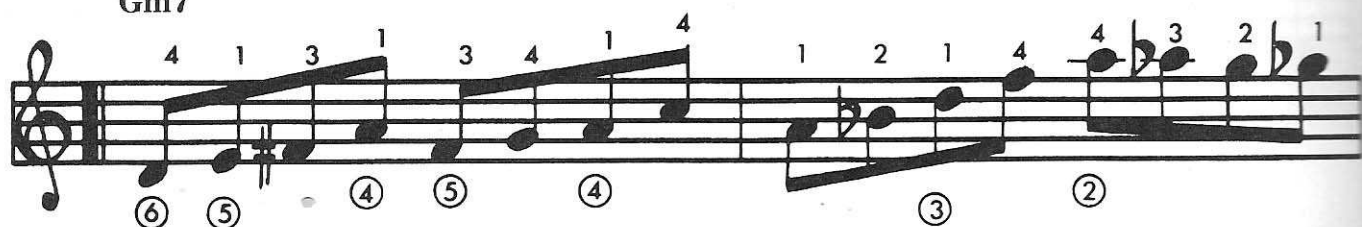


Gm7

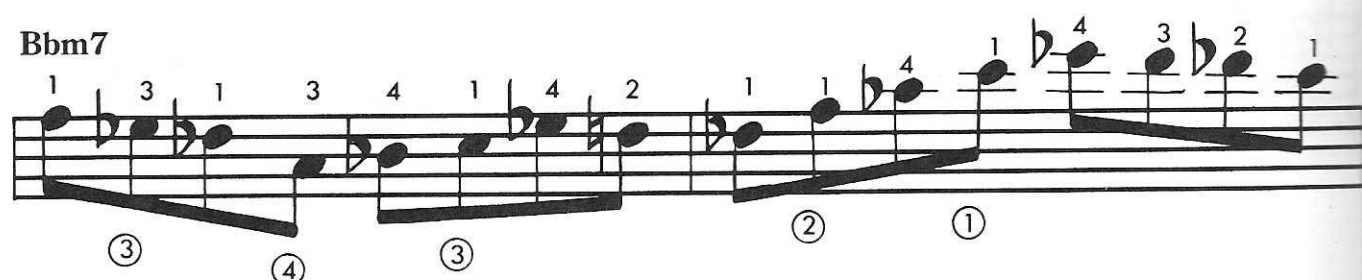


### LINE STUDY 3B

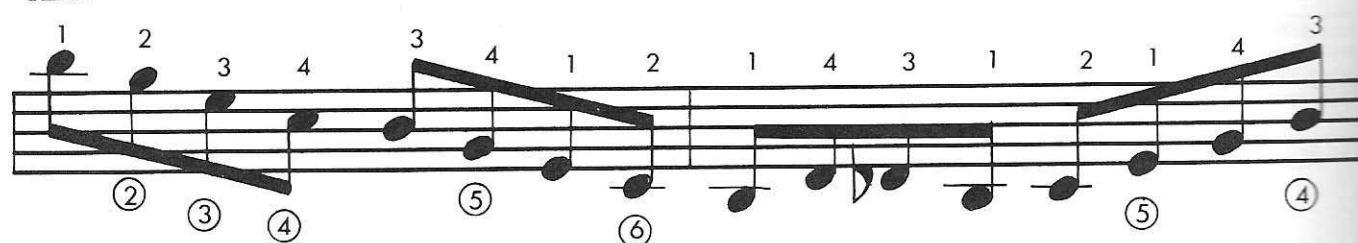
Gm7



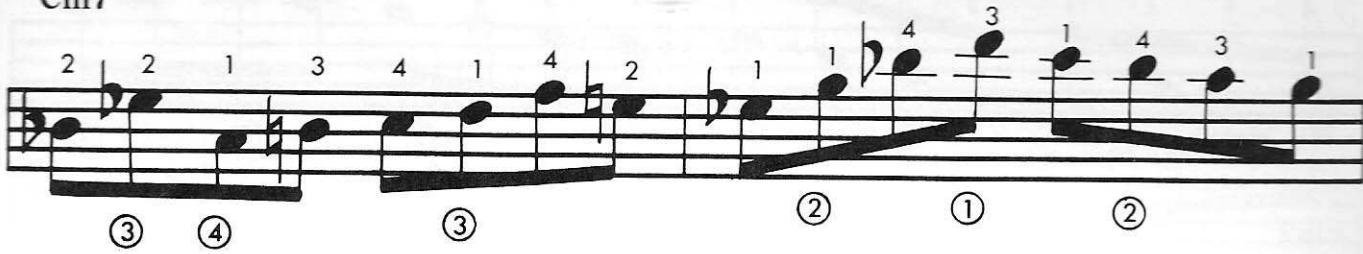
Bbm7



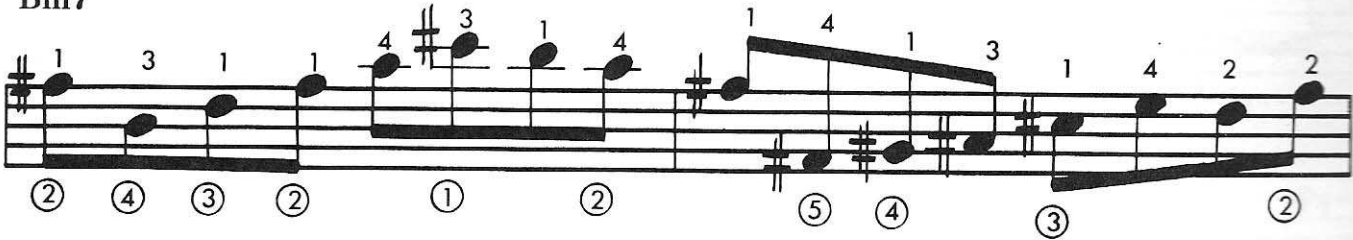
Am7



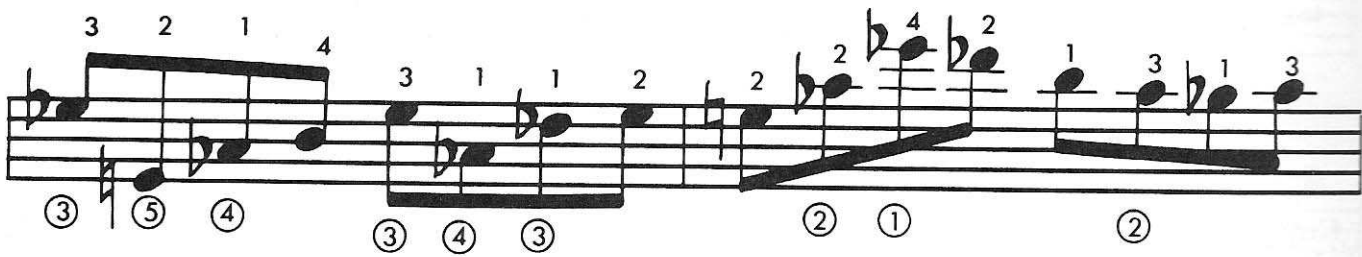
Cm7



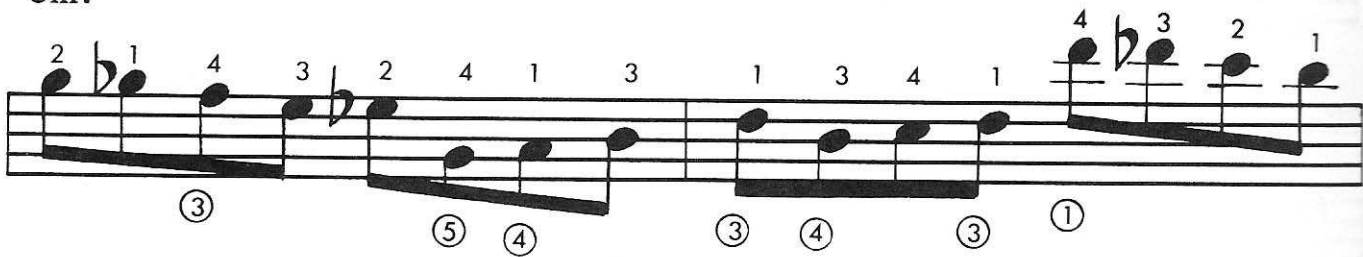
Bm7



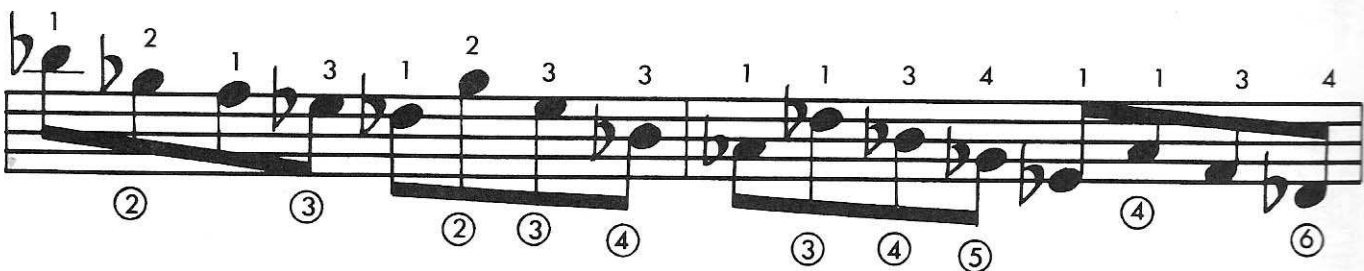
Dbm7



Cm7



Ebm7



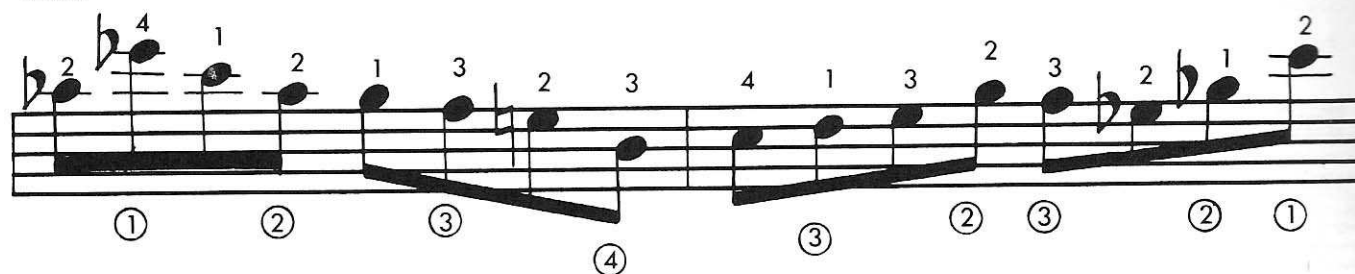


Dm7

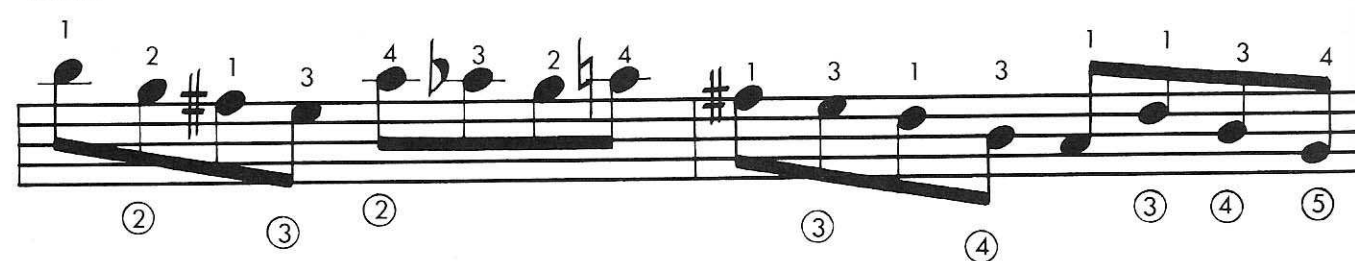
(3B cont.)



Fm7



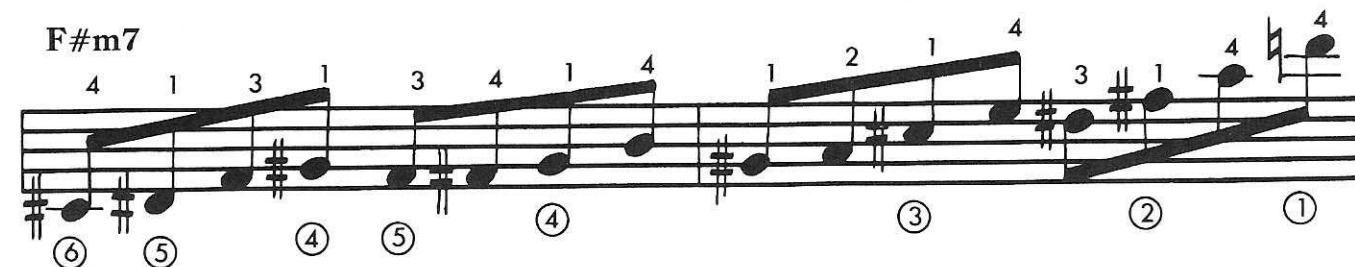
Em7



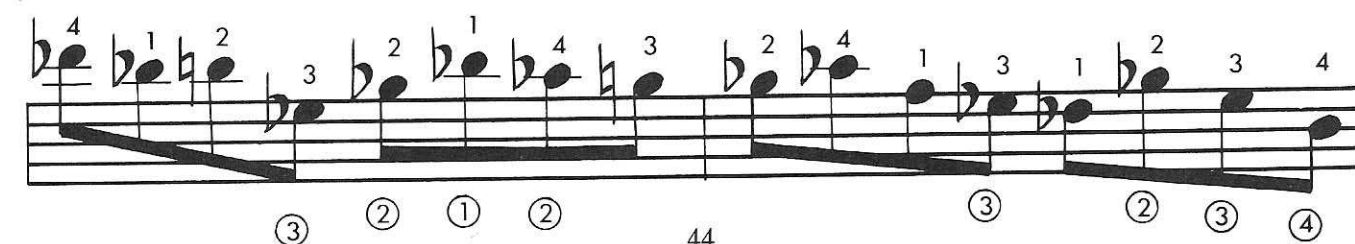
Gm7



F#m7



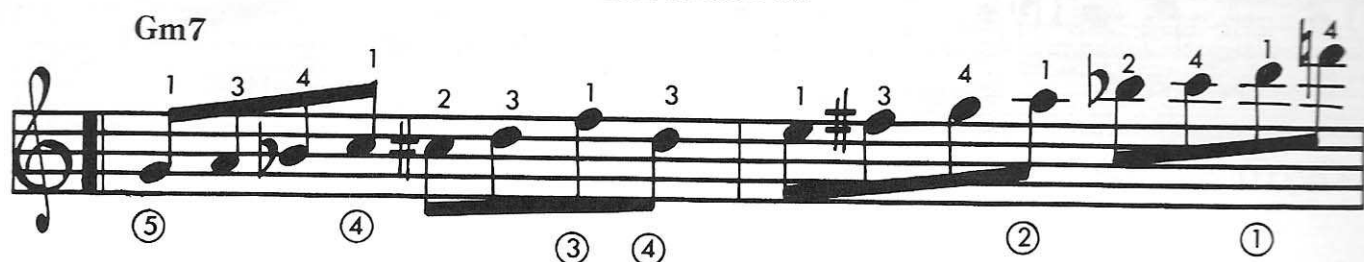
Abm7



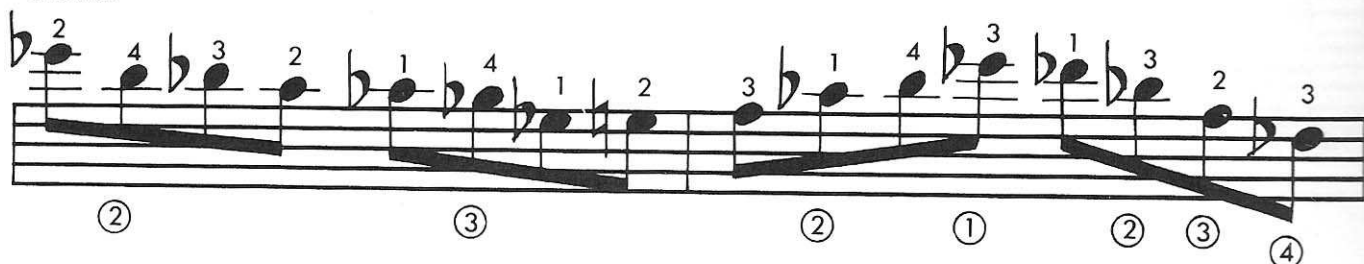
Line studies 4A and 4B start with the fourth form of activity, in G minor.

# LINE STUDY 4A

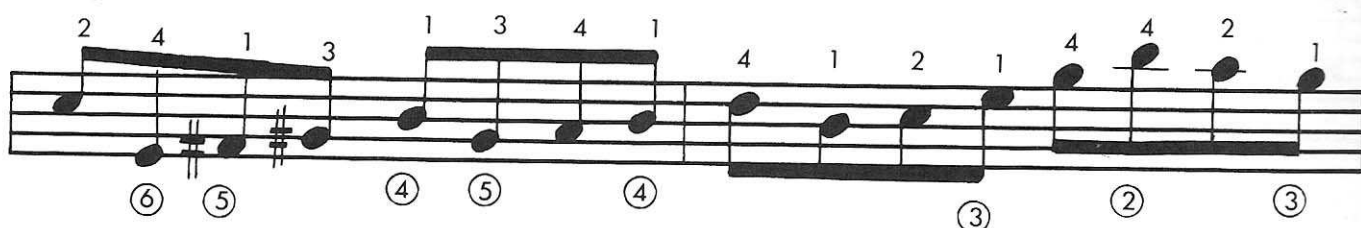
Gm7



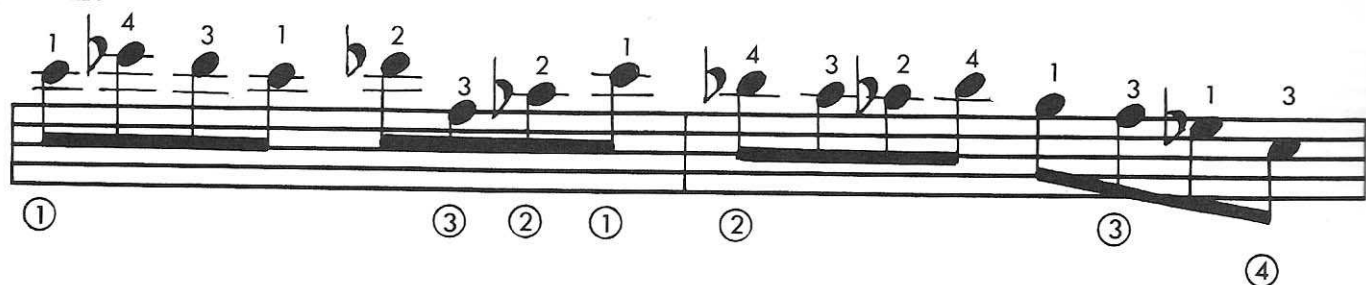
Abm7



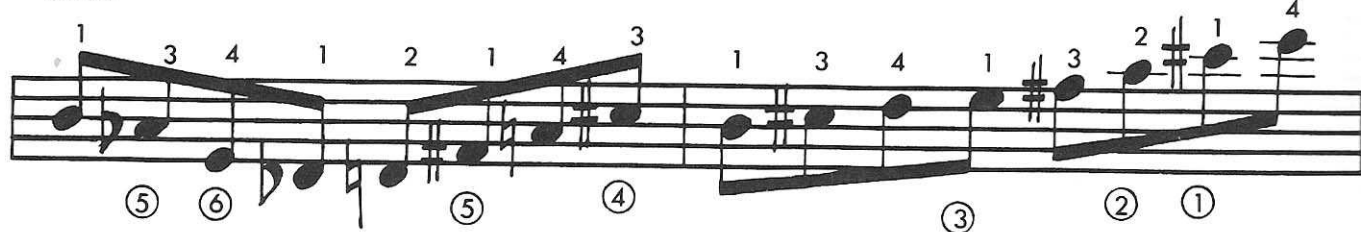
Am7



Bbm7

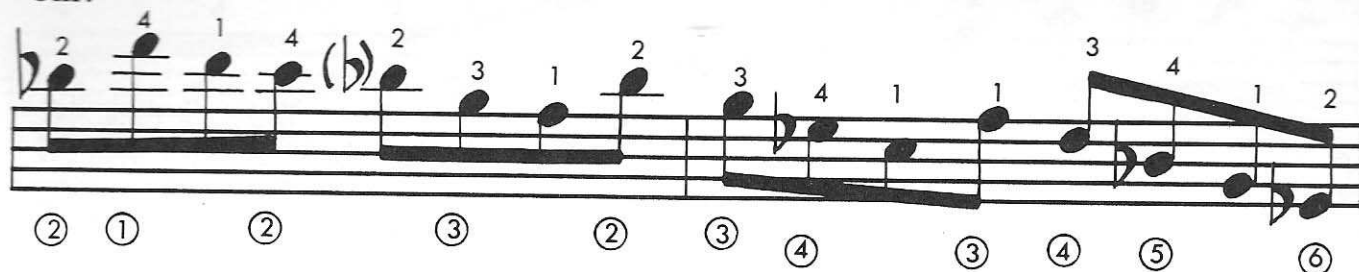


Bm7

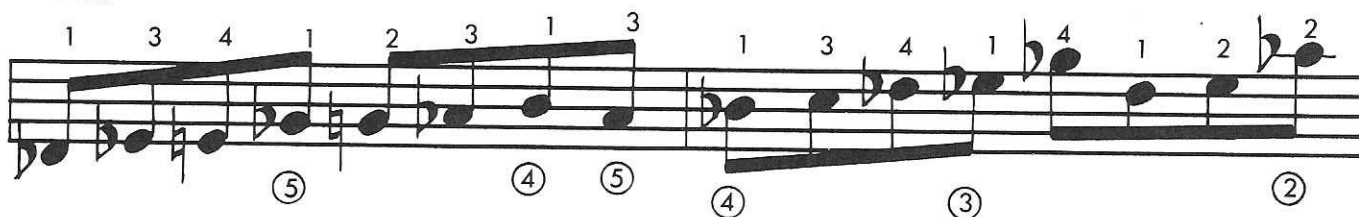


(4A cont.)

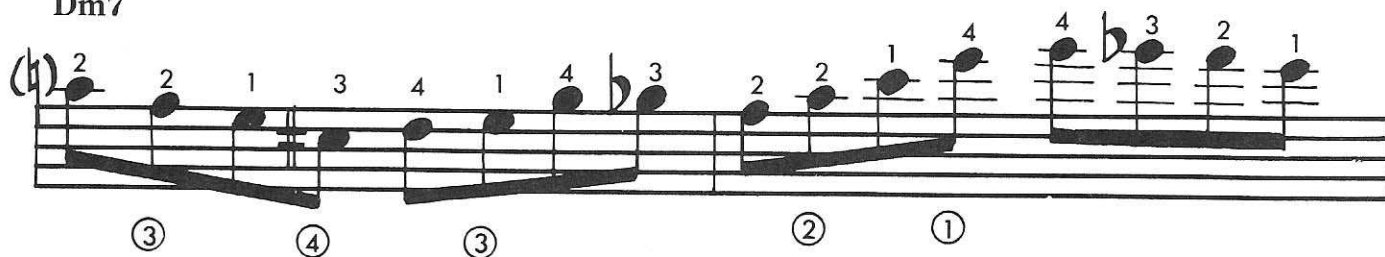
Cm7



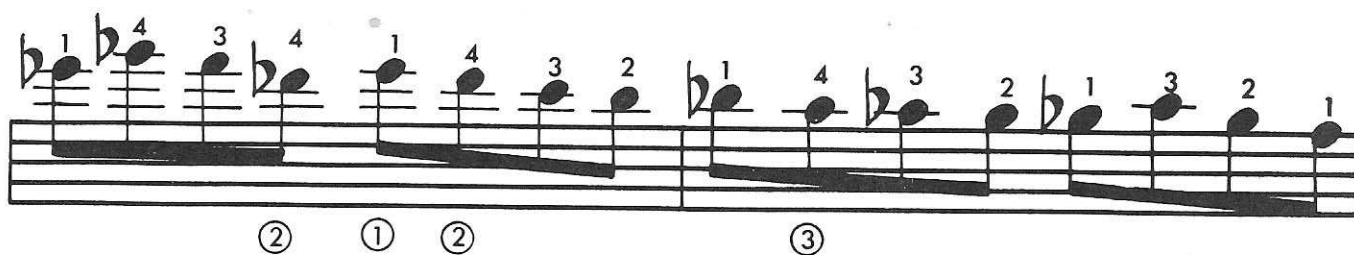
Dbm7



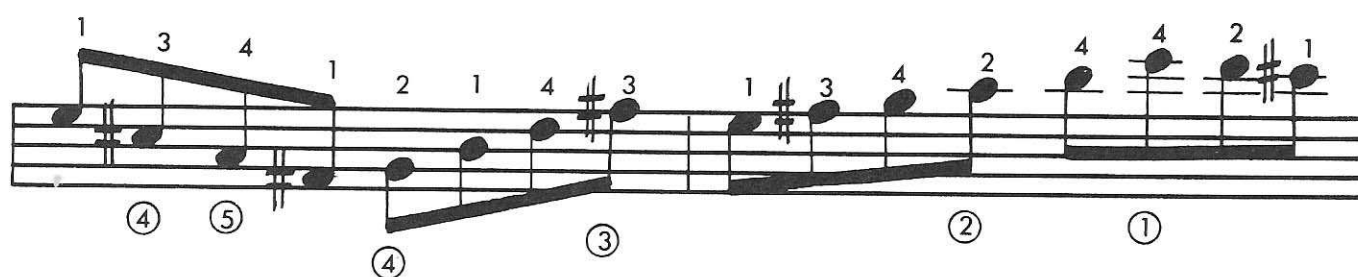
Dm7



Ebm7



Em7



(4A cont.)

**Fm7**

② ③ ② ① ③ ④ ③ ④ ⑤

**F#m7**

⑥ ⑤ ④ ③ ④

**Gm7**

➔

### LINE STUDY 4B

**Gm7**

① ② ① ④ ③ ② ③ ④

**Bbm7**

② ③ ④ ③ ④ ⑤ ⑥

**Am7**

⑤ ④ ⑤ ④ ③ ② ①

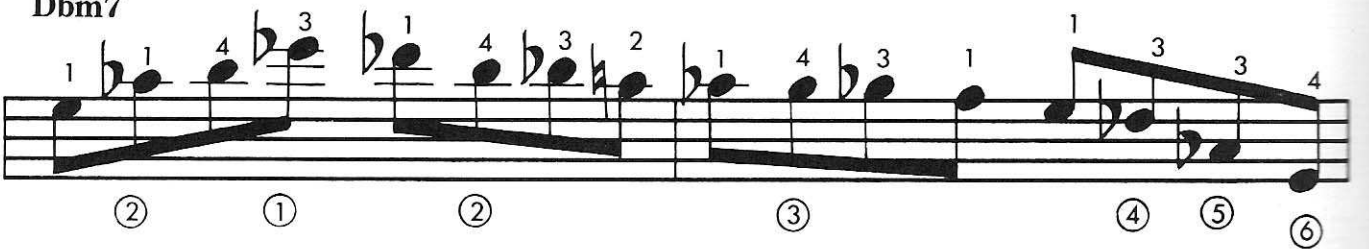
## Cm7



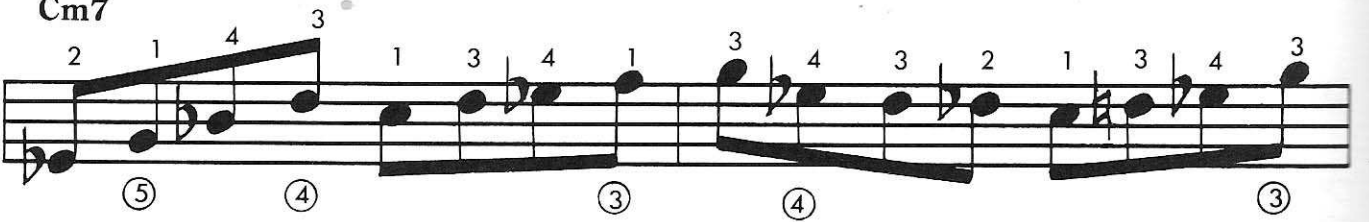
## Bm7



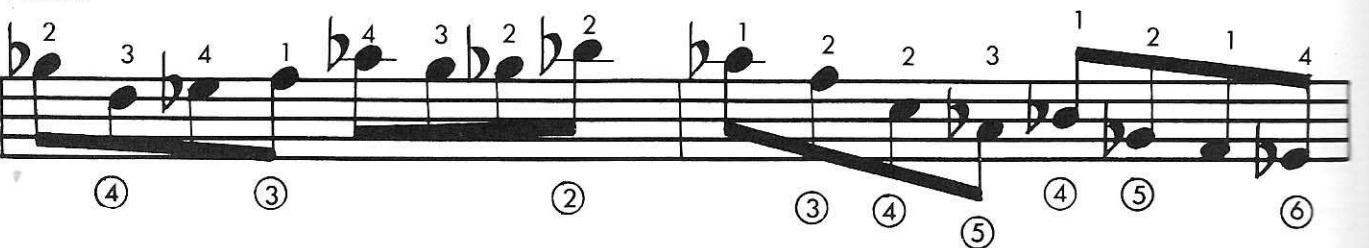
## Dbm7



## Cm7



## Ebm7



**Dm7** (4B cont.)

⑥ ⑤ ④ ⑤ ④ ③ ②

**Fm7**

② ① ② ③ ④ ⑤ ④

**Em7**

⑤ ④ ③ ④ ③ ④ ③ ② ①

**Gm7**

② ① ② ③ ② ③ ④ ③

**Gbm7**

② ③ ① ② ③ ④ ③ ④ ⑤ ④

**Abm7**

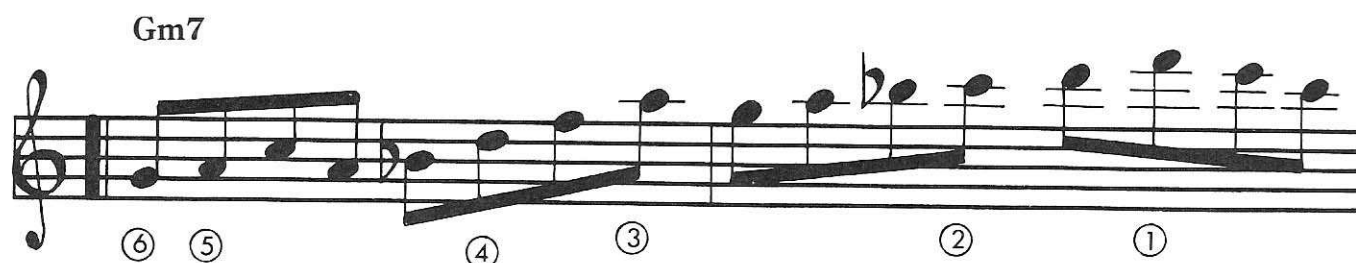
⑥ ⑤ ④ ⑤ ④ ③ ② ③



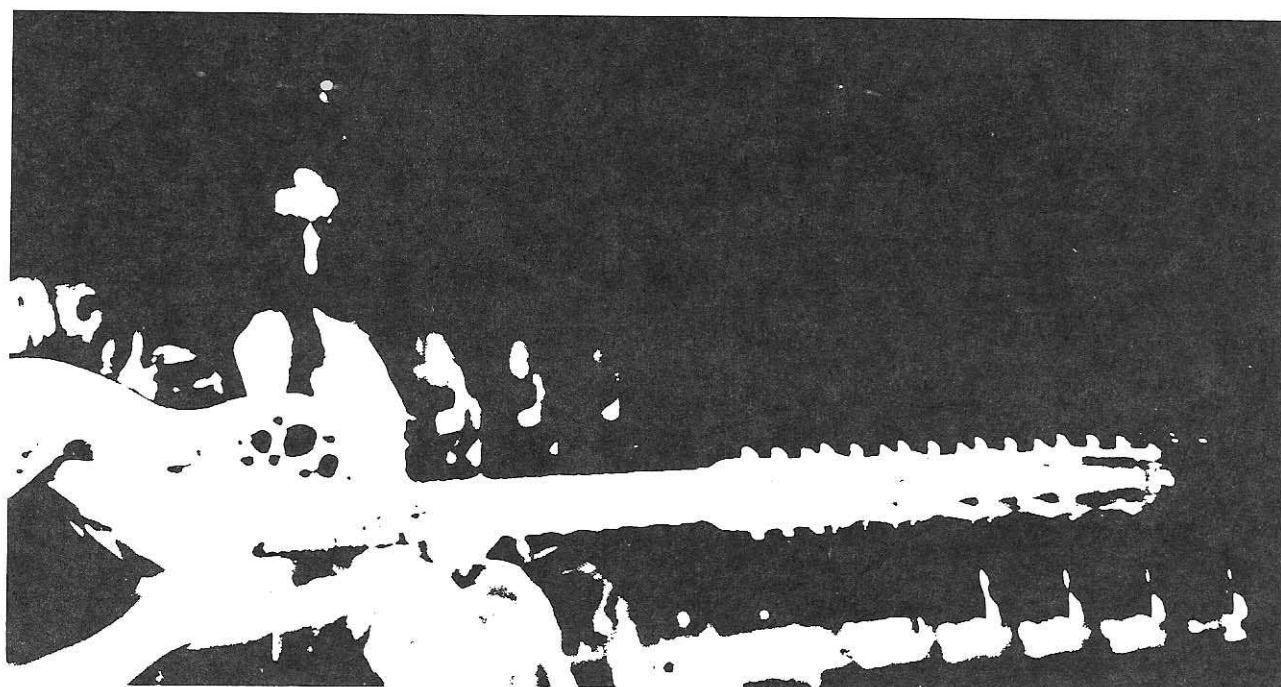
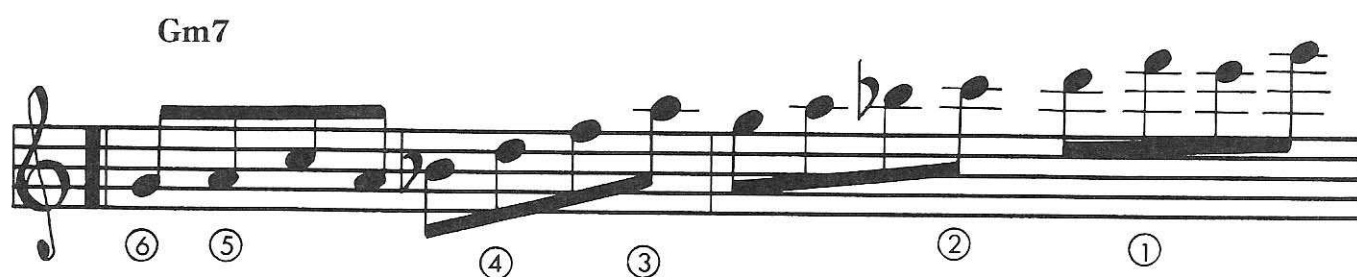
After learning the preceding eight line studies, it should be clear as to how to connect the five activities.

Ergo: Line studies 5A and 5B have been started and left for you to complete. The studies utilize the same progressions as the preceding eight.

### LINE STUDY 5A



### LINE STUDY 5B



# PHASE IV: Substitution & Reduction

Application through substitution and reduction. As was previously mentioned, complex chord changes can often be reduced to or substituted by more simplistic minor chord forms. It is by the means of chord substitution that an original composition titled "Nadine" will be reduced to these minor chord forms for the purpose of linear improvisation.

## CHORD SUBSTITUTION

Since the subject of chord substitution is a possible topic for a book in itself, we will not go into great detail nor explore every possibility on the subject. We will however, mention the more commonly used forms as well as the forms of substitution that are pertinent to this phase of study.

- I. Substitute chords of the same name and quality.      II. Converting to minor through substitution.

Cmaj = Cmaj7 = Cmaj9 etc.  
Cm6 = Cm7 = Cm9 etc.  
C7 = C9 = C13 etc.

Cmaj6 = Am7 (Relative minor)  
Cmaj7 = Am9 (Relative minor)  
Cmaj9 = Em7 (Secondary relative minor)  
C7 = Gm  
Cm7b5 = Ebm6

At this time the student should explore the subject of both contextual and compositional substitutions.

## PROCEDURE

- 1) Study the song in its original form (page 52).
  - a) Play the melody.
  - b) Study the chord changes.
- 2) On pages 53 and 54 you will find the chord diagrams and the simplified breakdown of the harmonic structure (lower stave).
  - a) Learn the chord voicings (provided in both musical and graphic forms).
  - b) Study the substitutions found immediately below the compositional harmony.
- 3) Study the analysis on pages 55 through 57.
  - a) Relate each substitution to the compositional harmony, with the aid of the written analysis.
  - b) Memorize the substitutions.
- 4) Examine the sample solo on pages 58 through 62.
  - a) Play through the sample solo until the study can be performed nonstop.
  - b) Record the changes on tape and play the solo over them.
- 5) Now that you've learned the tune thoroughly, compose your own solo over the changes, utilizing the substitutions given or any of your own substitute forms.

NOTE: It should be understood that the tune used in this phase is of a very abstract and disjoint nature. It was with the intent of showing the contrast of complexity vs. simplicity that this tune was selected.

ERGO: The next logical step of the procedure would be to apply the principles learned in this work to more common forms of progressions and songs.

EXAMPLES: "Stella by Starlight" . . . . . Victor Young  
"All the Things You Are" . . . . . Jerome Kern  
"The Days of Wine and Roses" . . . . . Henry Mancini  
"Summertime" . . . . . George Gershwin  
"Scrapple From the Apple" . . . . . Charlie Parker

# NADINE

by Pat Martino

**Bm7<sup>b5</sup>**  
**E**

**Bm7<sup>b5</sup>**  
**E**

**G<sup>b</sup>m**  
**Ab**

3

**Faug**  
**G to E**

**C**  
**F#**

3

**D<sup>b</sup>**  
**E**

**F<sup>#</sup>Ma7<sup>b5</sup>**  
**E**

**Em9**

**G<sup>b</sup>7<sup>#5</sup>**  
**#9**

**Cm9**

**E<sup>b</sup>m**  
**Ab**

**B13<sup>b5</sup>**

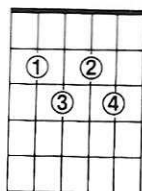
**F<sup>#</sup>m6**

**A<sup>b</sup>m**  
**B<sup>b</sup>**

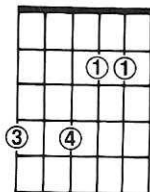
**Gm**  
**A**

# CHORD INVERSIONS WITH SUBSTITUTIONS

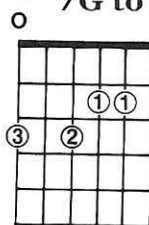
Bm7b5/E





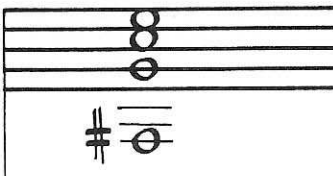
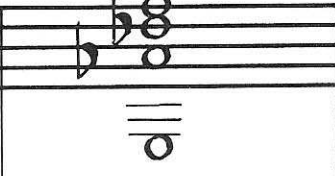
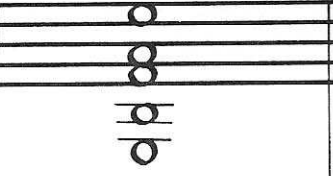
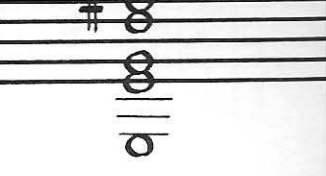


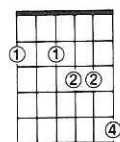

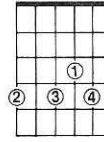
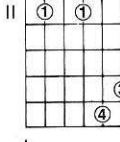
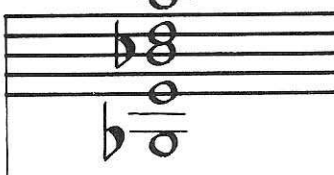
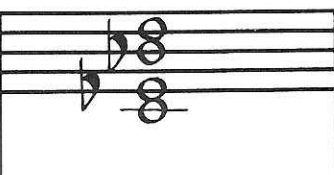

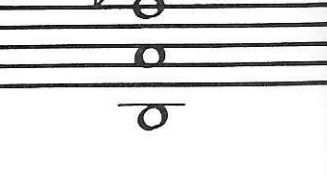
Gbm/Ab

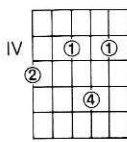
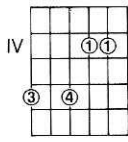
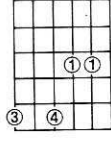
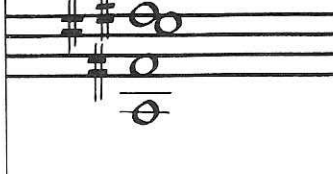
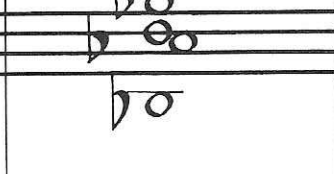
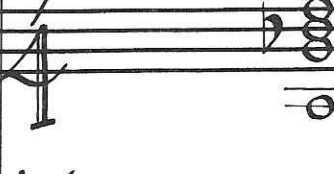


Faug/G to E



<b>C/F#</b> 	<b>Db/E</b> 	<b>Fmaj7b5/E</b> 	<b>Em9</b> 
			
<b>Am</b>	<b>Fm</b>	<b>Dm</b>	<b>Em</b>

<b>Gb7#5#9</b> 	<b>Cm9</b> 	<b>Ebm/Ab</b> 	<b>B13b5</b> 
			
<b>Gm</b>	<b>Cm</b>	<b>E<sup>b</sup>m</b>	<b>F<sup>#</sup>m</b>

<b>F#m6</b> 	<b>Abm/Bb</b> 	<b>Gm/A</b> 
		
<b>F<sup>#</sup>m</b>	<b>A<sup>b</sup>m</b>	<b>Gm</b>

## ANALYSIS ("NADINE")

**BARS 1-5:** The song starts with a Bm7b5 chord over an "E" bass note. The substitute form we will use is D minor. To better understand this, we must view the Bm7b5 chord in direct relation to D minor.

The Bm7b5 chord is comprised of the notes B, D, F, A.

The B note in relation to Dm is the sixth degree (6th).

The D note in relation to Dm is the root of the Dm (1).

The F note in relation to Dm is the minor third degree (b3).

The A note in relation to Dm is the fifth degree (5th).

**ERGO:** In relations to D minor, the Bm7b5 chord is a Dm6 chord in it's third inversion. Conversely, a Dm6 chord is a Bm7b5 chord in it's first inversion.

**RULE:** From the root of a minor seventh flat five (m7b5) chord, go up a minor third and play minor. i.e.: Bm7b5 . . . up a m3 = Dm6.

To carry the process a step further, we can also derive a dominant ninth (9th) chord from the m7b5 and minor 6th (m6) chords. In the case of Bm7b5 and Dm6, a G9 chord can be derived.

The B note in relation to the G9 chord is the minor 3rd degree (3).

The D note in relation to the G9 chord is the fifth degree (5).

The F note in relation to the G9 chord is the b seventh degree (b7).

The A note in relation to the G9 chord is the ninth degree (9).

**RULE:** To convert a dominant ninth chord to a minor form, go up a perfect fifth from the root of the 9th chord and play minor. i.e.: G9 . . . up a P5 = Dm6.

**OBSERVATION:** Minor seventh flat five (m7b5) chords are incomplete dominant ninth chords.

**BARS 6-7:** A Gb minor form was used over a Gb minor triad with an Ab note in the bass.

**BARS 8-9:** In bars 8 & 9, on F augmented triad with alternating "G to E" bass notes, is substituted by a D minor form.

I. The augmented triad, much like the diminished 7th chord, inverts to form two other augmented triads.

**EXAMPLE:**

F, A, C#	= F augmented
A, C#, E#	(F) = A augmented
(C#) Db, F, A,	= Db (C#) augmented

**NOTE:** Each note of the triad can be called the root and can name the triad.



II. Observe now that the augmented triad is an incomplete minor (Ma7) chord.

F, A, C# = D, F, A, C# (Dm maj7)  
A, C#, E# = F#, A, C#, E#, (F#m maj7)  
Db, F, A = Bb, Db, F, A, (Bbm maj7)

ERGO: Keeping in mind that an augmented triad has three names, there are three different minor (Ma7) substitutions for an augmented chord.

EXAMPLE: F augmented = Dm maj7

EXAMPLE: F augmented = F#m maj7

EXAMPLE: F augmented = Bbm maj7

To further demonstrate, if we look back at bars 6 & 7, we see that a Gbm (F# minor) form was used. It is now conceivably possible to play F# minor over bars 6, 7, 8, and 9. (The root of the Gb minor will move to the root of the F augmented producing the sound of F# minor to F# minor (Ma7).

TO SUMMARIZE: Over an augmented triad, go up a major 6th from the root and play either melodic or harmonic minor.

EXAMPLE: F augmented . . . up a major 6th = D melodic or harmonic minor.  
A augmented . . . up a major 6th = F# melodic or harmonic minor.  
C# augmented . . . up a major 6th = Bb (A#) melodic or harmonic minor.

**BAR 10:** In bar 10, the harmony is a C major triad with an "F#" note in the bass. Convert the C major to A minor (Am) being the relative minor of C major and treat the F# bass note as the 6th of A minor.

ERGO: For C/F# play A minor

**BAR 11:** In bar 11, the harmony is a Db major triad over an "E" note in the bass. The substitution is F minor.

EXPLANATION: If we view the Db major triad alone, the most obvious substitution would be its relative minor (Bb minor). However, the "E" note in the bass would not go very well with Bb minor (creating a b5th in the bass). Therefore, we go to the secondary relative minor of Db major (which is the III chord of Db), namely, F minor.

Again, we must relate the  $Db/E$  directly to F minor.

The Db note in relation to F minor is the b6th.

The "F" note in relation to F minor is the root.

The Ab note in relation to F minor is the b3rd.

The E note in relation to F minor is the maj7th.

Also notice that all of the notes in the  $Db/E$  chord can be found in an F harmonic minor scale (F, G, Ab, Bb, C, Db, E).

There is still, however, a problem with the "E" bass note. It still has a tendency to clash with the F minor. Therefore, it must be understood that although the substitutions used are theoretically correct, the nature of the original harmony (that being very abstract) will not allow a definite "In The Pocket" type of sound to be produced. It then calls on the musician to rely on his experience and training to create a phrase that will both define the harmony and still be pleasing to the listener's ear.

**BAR 12:** Treat the bar harmony  $F^{maj7b5}/E$  exactly as it appears and play the relative minor (Dm) form.

**BAR 13:** Play an "E" minor form over Em9.

**BAR 14:** In bar 14, we encountered an altered dominant 7th chord (Gb7 #5 #9). The substitution chord is G minor. Although there are many ways to treat an altered dominant chord, only the substitution used here will be explained.

**EXPLANATION:** One way to create the sound of an altered dominant chord is to go up  $\frac{1}{2}$  step from the root of the dominant chord and play minor.

**EXAMPLE:** For Gb7 altered, go up  $\frac{1}{2}$  step and play G minor.

The following are two different types of G minor scales and how they relate to the Gb7 chord.

<b>EXAMPLE:</b>	G harmonic minor	G	A	Bb	C	D	Eb	F#
	Relation to Gb7	b9	#9	3rd	b5	#5	6	root
	G melodic minor	G	A	Bb	C	D	E	F#
	Relation to Gb7	b9	#9	3rd	b5	#5	b7	root

It is clear to see from the examples that although both minor scales yield the altered 9ths and 5ths (b9, #9, b5, #5), only the melodic minor contains the b7, which is the "hot" note of a dominant 7th chord.

**ERGO:** Over Gb7 #5 #9 use G minor (melodic)  
or G minor (harmonic)

**BAR 15:** Play a "C" minor form over Cm9

**BAR 16:** In bar 16, play an Eb minor form over the  $Ebm/Ab$  chord

**BAR 17:** In bar 17, B13b5 was substituted by an F# minor form. (Refer to the explanation in bars 1-5, dealing with dominant chords.)

**BAR 18:** Play F# minor form over F#m6.

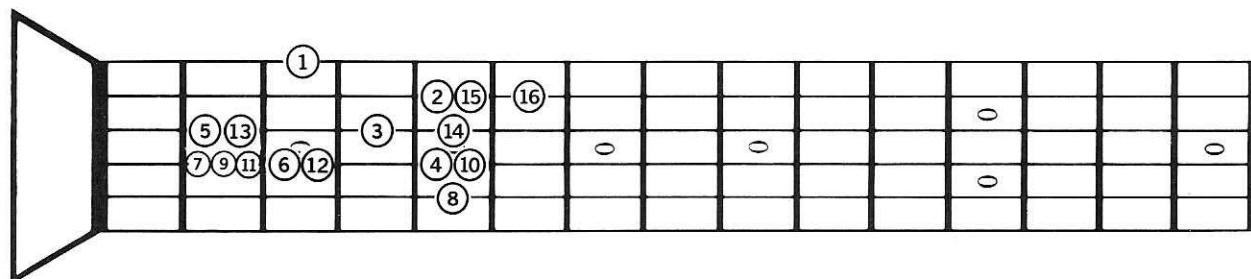
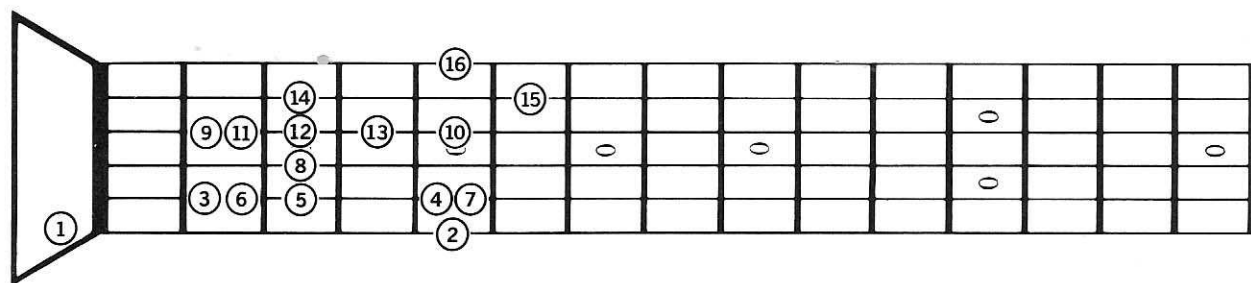
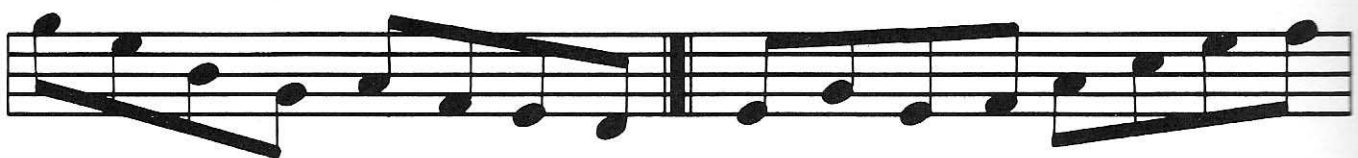
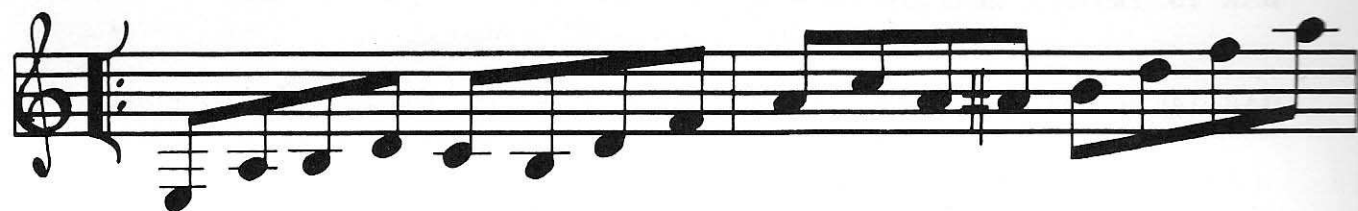
**BAR 19:** Play Ab minor form over  $Abm/Bb$

**NOTE:** The Bb bass note can be viewed as the 9th degree in relation to Ab minor.

**BAR 20:** Play G minor form over  $Gm/A$

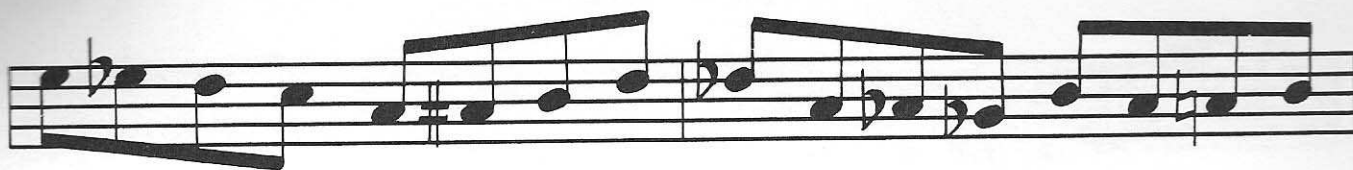
# Solo for NADINE

Bm7b5/E

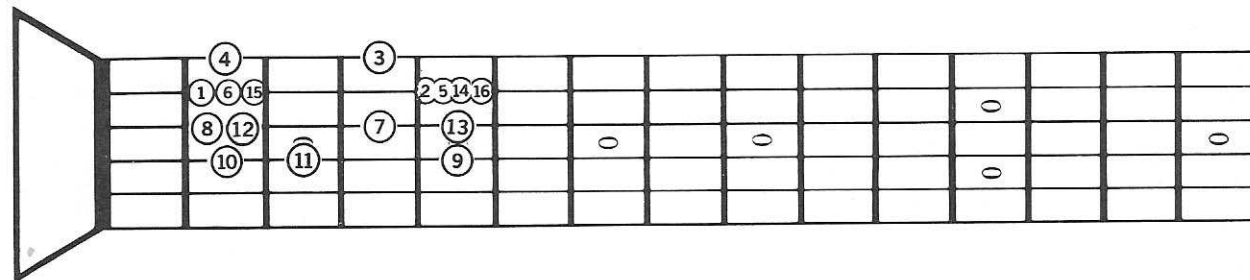
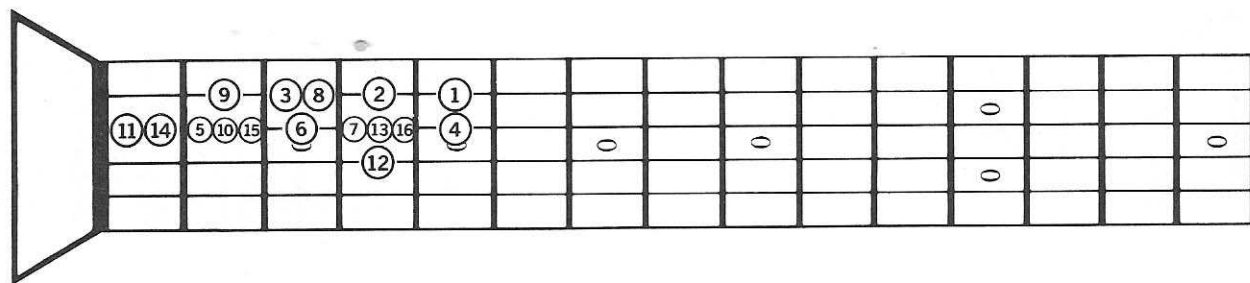


Solo for NADINE (cont.)

Gbm/Ab

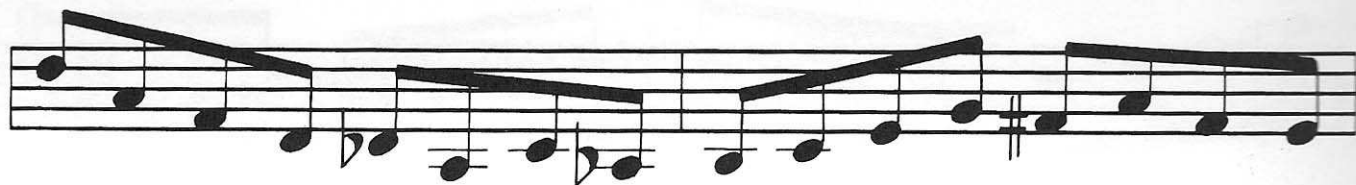


Faug/G to E



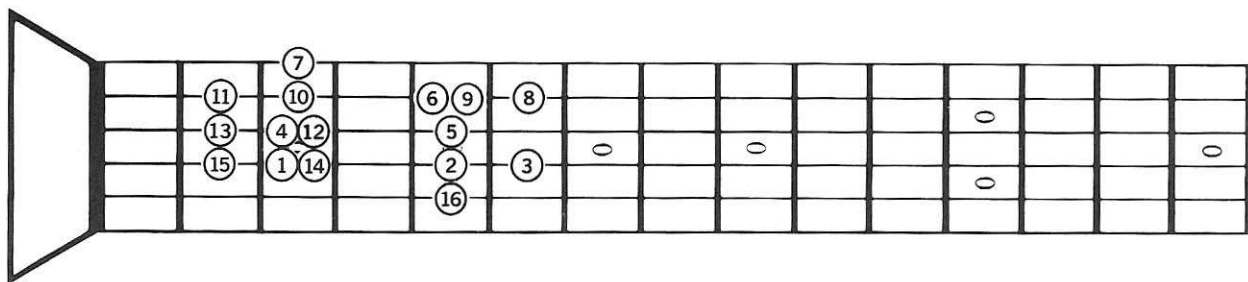
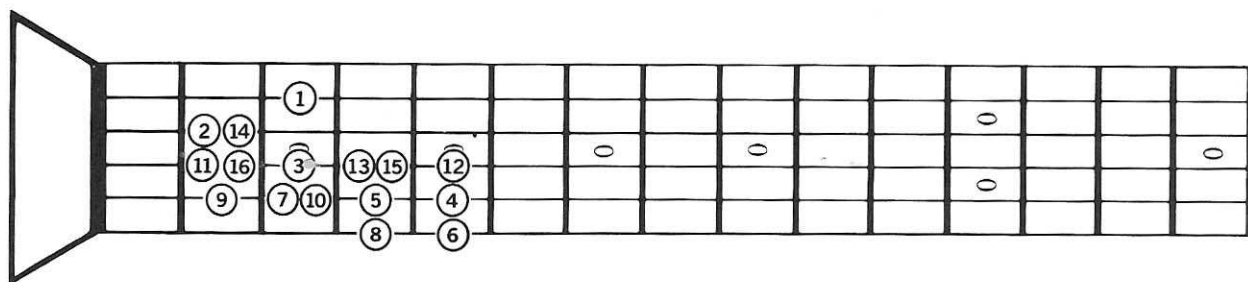
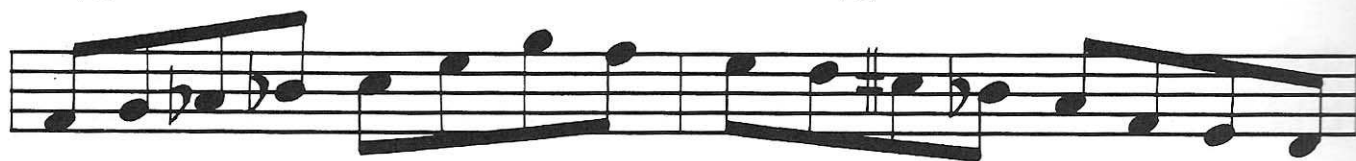
Solo for NADINE (cont.)

C/F#



Db/E

Fmaj7b5/E



Solo for NADINE (cont.)

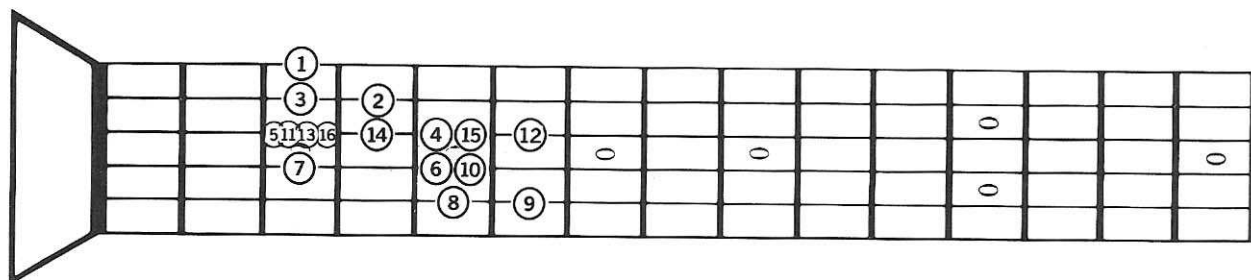
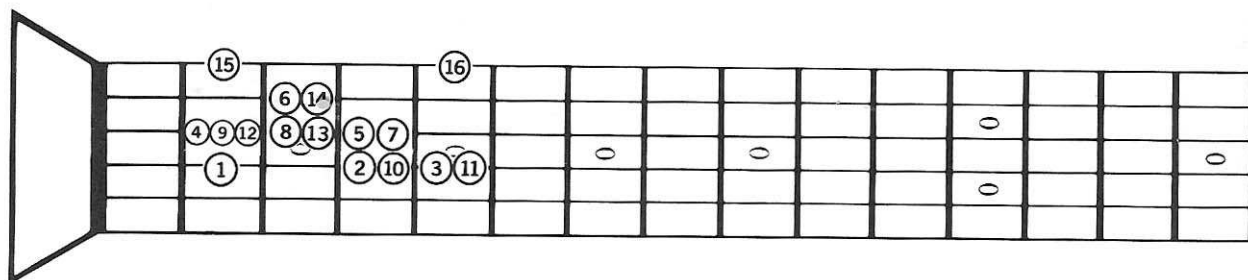
Em9

Gb7#5#9



Cm9

Ebm/Ab





Solo for NADINE (cont.)

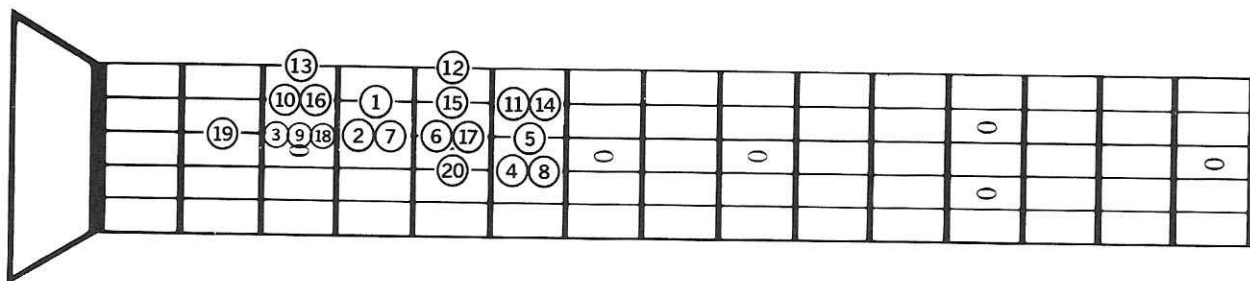
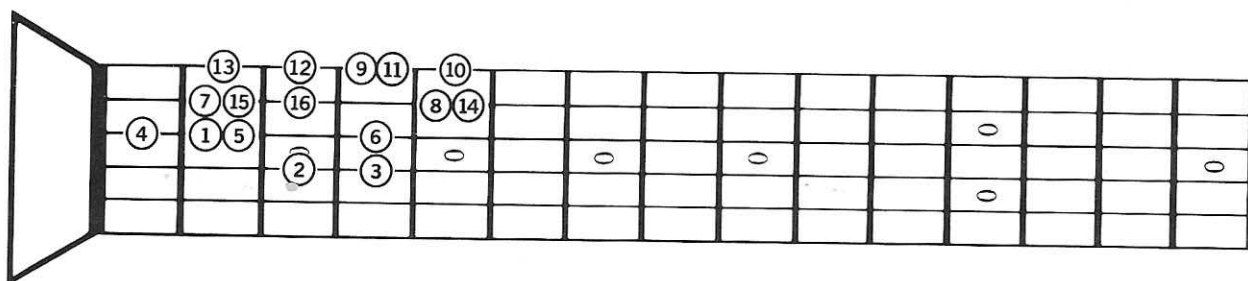
B13b5

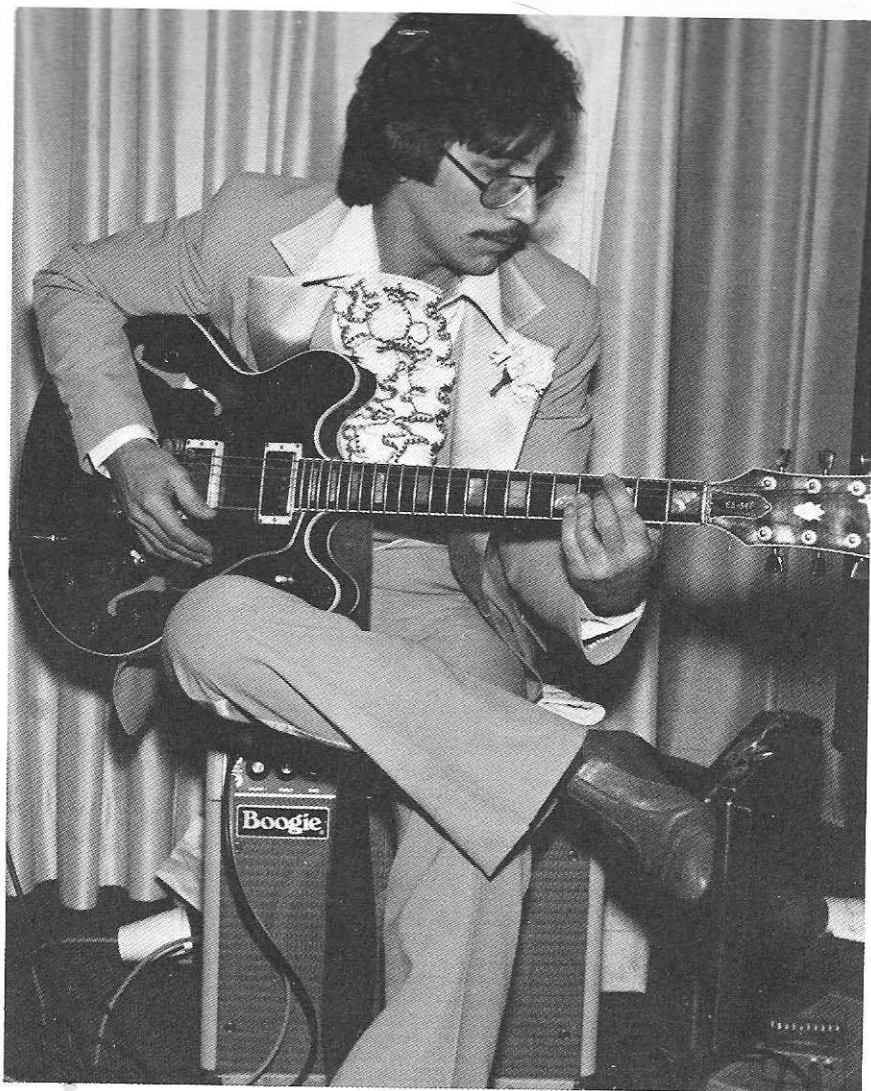
F#m6



Abm/Bb

Gm/A





## TONY BARUSO

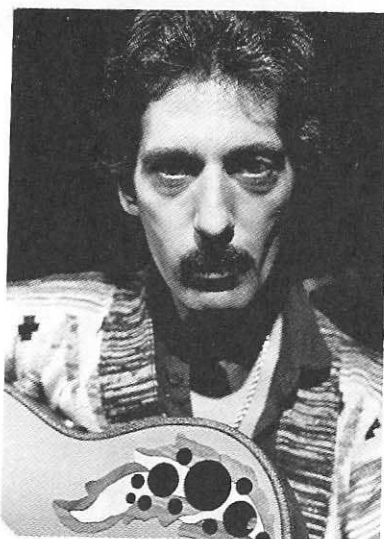
In 1979 Tony moved from New York to Los Angeles to attend a one-year course of study at the **Guitar Institute of Technology**. While at **G.I.T.** Tony had the opportunity to study with two of the finest guitar players in the world, namely, **Pat Martino** and **Joe Diorio**.

It was there that the close friendship and association with Pat Martino evolved. Tony spent many hours with Pat, exchanging ideas and discussing Pat's views on music and life in general. It is from these many hours of interface that this work came to be.

Upon completion of his studies at **G.I.T.** Tony was hired on as librarian and rapidly worked his way up to the position of co-ordinator of curriculum and staff music copyist for the entire school.

While holding this position Tony had the chance to, in various capacities, work for and with many other artists such as: **Howard Roberts**, **Tommy Tedesco**, **Joe Diorio**, **Robben Ford**, **Jay Graydon**, **Ron Eschete**, **Larry Carlton**, **Don Mock**, **Tim Bogert** and **Les Wise**.

Tony has now returned to his native New York, where future projects with Pat Martino are in the works.



## IN CLOSING

In deciding whether or not an instructional method is of any value to the student who subscribes to it, one must ask the questions: Has the method been effective in raising the students level of awareness? Has the method offered and delivered specific data and/or information that will contribute to the students intellectual growth? In other words, has the student learned anything?

This method has tried to instruct the student in certain areas of guitar playing and music theory. It has offered a different approach to improvising over chord changes and viewing the guitar fingerboard as an entire entity, comprised of five different elements. It has offered a brief explanation of chord substitution and some of it's more common applications.

It is the author's sincere hope that the preceding pages of study provide some food for thought, and in some way appease your on-going thirst for knowledge.

It is not the author's intent, however, to suggest that the course of study offered in this book is of any more value, or is in any way, better than other methods in use today. For, in music as in life itself, there are no better ways . . . just different ways!

The Best of All

A handwritten signature in cursive script that reads "Pat Martino". The signature is fluid and expressive, with a long, sweeping line extending from the end of the name.

Pat Martino